"Build it...if you can!": Discretion, Building Inspectors and Part 8 of Ontario's 2006 Building Code*

Mario Levesque Memorial University of Newfoundland – Corner Brook

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Abstract:

This paper examines how a recent broadening of discretionary powers afforded Building Code Inspectors in Ontario as a result of the adoption of the 2006 Ontario Building Code (Part 8 – Sewage Systems) have been initially embraced and their effects on the Building Code's implementation. The focus is on the initial few years following the increase in discretionary power, an area little studied in the literature, yet a crucial period of time given the fact attitudes and habits formed at this early stage can have significant effects on implementation activities. The results reveal how concerns over liability issues have led to the continuation of narrow Building Code interpretations thus impeding efforts to foster innovation and competitiveness therefore limiting efforts to improve the protection of water resources. The results also underscore the importance of front line service workers in policy implementation given their ability to act as significant "brakes" on the neo-liberal agenda.

Introduction

Discretionary power has long been at the heart of policy implementation studies. Top-down theories of implementation have minimized or dismissed discretionary powers of front line service workers. For these advocates, a direct causal link between policies and outcomes is assumed (Pressman and Wildavsky, 1973; Sabatier and Mazmanian, 1979, 1980). This is in stark contrast to bottom-up theories of policy implementation which have emphasized the importance of discretionary powers to adapt to local conditions. On paper, policies may appear to make sense yet to the worker in the field they may be of little use in solving a problem to the point of hindering a problem's resolution (Lipsky, 1971, 1980; Elmore, 1980).

Ample support for the bottom-up theory of policy implementation is found in this paper but, as is argued, changes in discretionary powers also need to be teased out for their effects on implementation activities to obtain fuller explanations. This is readily seen in relation to regulatory bureaucracies as with Building Code Inspectors who routinely confront situations with people from different socio-economic backgrounds. The question for Inspectors then becomes: Do they rigidly adhere to the Building Code or use discretion in enforcement activities knowing full well their decisions may impose significant economic costs on small businesses or on seniors who often live on fixed incomes? Moreover, how is this affected by enhanced discretionary powers after legislative changes (i.e. more discretion)? It is this latter question that is the focus of this paper.

This paper examines how a recent broadening of discretionary powers afforded Building Code Inspectors in Ontario as a result of the adoption of the 2006 Ontario Building Code has been initially embraced and its effects on the Building Code's implementation. The investigation is limited to Part 8 of the Building Code, Sewage Systems, in order to limit the research design

and the importance of such systems given their potential impact on sources of drinking water. The significance of discretionary powers in bottom-up theories of implementation is first sketched to reveal the need to examine the initial period after such powers have been changed to provide an enhanced depiction of policy implementation. The second and third sections profile changes to Ontario's Building Code and the methodologies used in this investigation respectively. Section four presents the research findings and the discussion and conclusions that follow emphasize liability factors, among other things, preventing Building Inspectors from effectively embracing their enhanced discretionary powers thus highlighting their ability to constrain enlargement of the neo-liberal agenda.

Discretionary Power and Policy Implementation

The importance of the use of discretion by front line service workers should not be underestimated. These workers, such as social workers and police officers, were termed "street-level bureaucrats" by Michael Lipsky whose work laid the foundation for bottom-up theories of policy implementation (1971, 1980). Lipsky maintained that street-level bureaucrats could significantly affect implementation outcomes given their discretionary powers. Such discretion was required given complexities surrounding situational decision-making, sensitivities to those affected by decisions, and worker's self-regard (1980, 15). In other words, as Carroll and Siegel note, "civil servants must make their own decisions using their own judgment [given the fact] rules cannot be made to cover every situation" (1999, 73). In fact, depending on the level of discretion exercised, their effect can be so great as to label them policy makers (Lipsky, 1980).

This emphasis on the centrality of front line service workers was in direct response to top-down theories of policy implementation where their role in implementation processes was

minimized. These scholars assumed central decision makers made policy decisions to be implemented by those in the field who had little effect, if any, on the process. In essence, everything could be well-planned in advance, accounted for and controlled from the top.

Implementation failures were blamed on the inability of local authorities to carry out the required tasks as instructed (for an overview see Parsons, 1995). Essentially, a large part of top-down theorists were looking for recommendations to improve policy implementation (e.g. more resources, enhanced training) while bottom-up theorists were more interested in examining how to make the policy work given implementation constraints in the field (i.e. policy ill fitted for local conditions). These are not the same things and spawned a set of hybrid theories that tried to blend the ideas from the two approaches (for an overview see Pulzl and Treib, 2007, 95-97). However, whether this is feasible is questioned given fundamental differences in power allocations and conceptualizations of the policy process (see deLeon, 1999).

Whether one accepts the key position afforded front line service workers as put forth by bottom up theorists or their more moderate, yet important, position as put forth by hybrid theorists in policy implementation, the fact remains front line service workers can possess significant amounts of discretionary power. Yet this calls into question what is meant by use of the term discretionary power. Discretion in Lipsky's sense was used to highlight administrative difficulties (problems) *and* to highlight practices used by street-level bureaucrats that deviated from those prescribed to ensure effective policy implementation. The focus here is on the latter: policy discretion.¹ This is defined by Carroll and Siegel as "the ability of the administrator to make a decision without consultation or approval of a hierarchical superior" (Carroll and Siegel, 74). This typically takes the form of broad discretion in interpretation of rules and guidelines to help the client in question. In other cases, such discretion in interpretations can be used for

specific bureaucratic ends (e.g. narrow rule interpretations to limit liability exposure). Such use of discretion is readily found in a number of instances including where people have specialized training (see Carroll and Siegel, 74-76). Such specialized training exists with Building Inspectors as detailed in the next section.

Given the importance of front line service workers, more knowledge is needed about their use of discretionary power and its effects on policy implementation. In particular, little is known about how changes to their discretionary powers—specifically, a broadening of their discretionary powers—are initially embraced and their effects on policy implementation. This initial period of time, termed a "transitionary period" in this paper, is crucial for policy implementation given the fact attitudes and habits formed at this early stage can have significant effects for the future success of any given policy.

It is perhaps easier to assume stable discretionary levels in various situational settings for examination. This is what Lipsky (1971) himself did. In his groundbreaking work, he looked at the discretion used by police officers, teachers and social service workers. In other words, a set level of discretion was assumed to exist with each occupation from which he underscored the importance of street-level bureaucrats (Lipsky, 1971). A similar pattern was followed in his later work (e.g. Lipsky, 1980).

Even the rich literature that has developed to extend Lipsky's basic tenets has followed a similar path. Moore (1987), for example, made a key point in arguing for the need to differentiate between different types of street level bureaucracies (e.g. police vs. social service worker), to consider decision-making as an ongoing and contingent process, and to consider the street level bureaucrats themselves given they may have different capacities and discretionary

tolerance levels. Yet again, discretionary levels were assumed to be static within each of these situations.

Static discretionary levels are also found in the work by scholars that have responded to Moore's arguments given a diverse set of street-level bureaucracies have been investigated since he published his work. These have included those related to educational management (e.g. Taylor, 2007), neighbourhood change (Proudfoot and McCann, 2008), social welfare (e.g. Duner and Nordstrom, 2006; Riccucci, 2002; Maupin, 1993; Moore, 1990; Maynard-Moody, Musheno and Palumbo, 1990), health care (Peterson and Brofcak, 1997), employment policy (e.g. May and Winter, 2007) and policing (e.g. Gianakis, 1994). Much less work has been undertaken on discerning the characteristics of street-level bureaucrats themselves (e.g. Lo, Liu and Zhao, 2008; Lo, Lam, Yuen and Fang, 2002), on the effects of their clients (e.g. Thomas, 1986) or on the contextual situation (Weissert, 1994; Nielson, 2007). A notable and insightful exception is the work by Carroll and Siegel (1999) which combines a number of these aspects in their study of the work performed by field-level service workers in Canada and their relationship with their superiors.

What can we make of this body of literature? First, studies of front line service workers and their use of discretionary powers have assumed a constant or static level of discretion. Yet such studies only tell part of the story in that they assume policy implementation is constant after a policy decision has been made. Rather, once a decision is made, there is typically a "transitionary period", the first few months to years (1-3), where policy implementation is variegated. That is, some front line service workers readily accept and make use of increases in discretion afforded them while others may remain reluctant to change from what they previously did. Still, a third group can be found between these two camps where they make selective use of

the expanded discretion afforded them. The question is: What explains these different responses from front line service workers? Furthermore, how have these responses affected policy implementation? It is these questions that frame this investigation in relation to Building Inspectors in Ontario after changes to the Ontario Building Code in 2006. Second, the bulk of the literature to date has focused on social welfare agencies. Yet more study is needed of regulatory agencies so as to draw comparisons *between* regulatory agencies. Not only may discretionary levels be different between such agencies (e.g. police officers vs. building inspectors), so may the use of discretion by the front line service workers themselves. This study contributes to such an investigation by focusing on a little studied regulatory body: Building Inspectors. Third, more information is needed about the characteristics of front line service workers in relation to their use of discretionary power in different situational settings, something to which this paper contributes. The next section examines the recent evolution of Ontario's Building Code and how this affects Building Inspectors.

Building Code Primer

Building codes are complex documents. Strictly defined, building codes are "legal instruments intended to ensure that buildings, when constructed in accordance with the regulations, provide socially acceptable levels of health, safety, welfare and amenity for building occupants and the community in which the building is located" (Meacham et al., 2005: 91). In other words, building codes define the design of building structures including the materials that may be used and in what manner they may be assembled in order to ensure a minimum level of public safety. Canada has a centralized system of building code development that dates back to the 1930s. The Canadian Commission on Building and Fire Codes in conjunction with various trades and

provincial stakeholders oversees the ongoing development of Canada's seven national codes including National Building, Fire and Plumbing Codes of Canada.² It is important to note that these national codes are *model* codes and need to be adopted by provincial governments in order to take effect (see Table 1). Provinces may choose to adopt some of the codes, amend or supplement these codes or to develop their own codes independently (Canadian Commission on Building and Fire Code, 2003; National Research Council, 2003).³

Canada's national codes underwent significant changes in the early 2000s. Previous reviews of the National Building Code revealed that its' prescriptive orientation stifled innovation and reduced competitiveness (Desserud et al., 2003; Archer, 2005). The Codes specified, for instance, the exact dimensions of the lumber to be used for various applications. Building inspectors in the field could take out their tape measure and verify that such requirements were met. In other words, Code compliance was straightforward or "black and white". Either one met the requirements or did not in which case modifications were needed to bring the building into compliance. Under such a prescriptive format, building officials had little discretion in ensuring code compliance (see MMAH, 2009).

A move to a performance based code was desired yet problematic. In contrast to prescriptive codes, performance based codes specify the required performance of the building system and do not specify the materials to be used in meeting that performance or their assembly (Foliente, 2000). Innovation and competitiveness are increased yet as Meacham et al. (2005) point out, serious questions remain about exactly how society defines what they expect from their buildings and how performance is defined and measured. Complicating matters were the poor records of countries that had previously adopted performance based codes such as the United Kingdom where construction activity virtually ground to a halt. Contractors and others

Table 1 **Canadian Building Regulation Concepts**

model national codes^a

- set out minimum national requirements for building construction
- includes a/ model building code detailing for safety, health, accessibility and building protection; b/ model fire code detailing fire safety for building operation; and, c/ model plumbing code detailing safe installation of potable water and wastewater systems
- other model codes include electrical, gas and energy codes
- not legally binding until adopted by relevant jurisdictional authority
- can be prescriptive, performance or objective-based or a combination thereof

prescriptive codes^b

- explicitly state what must be done to achieve code compliance
- e.g. specifies types of materials to be used to meet fire resistant ratings in various settings; minimum clearance distances between sewage systems and water sources and property lines

- performance-based codes^c describe required performance to be achieved; do *not* state size or type of building components to be used nor how they are to be assembled
 - e.g. building structures should be able to withstand a fire long enough for people to escape safely; water sources and nearby properties should not be contaminated by sewage systems

objective-based codes^d

- clarifies scope of codes in elaborating acceptable solutions, their objectives and functional statements
- acceptable solutions may be prescriptive or performance-based See Table 2 for a detailed example.
- objectives define codes and state rationale behind acceptable solutions (e.g. health, safety, environmental integrity, accessibility, fire protection) See Table 2 for a detailed example.
- functional statements translate objectives into operational terms See Table 2 for a detailed example.
- code compliance achieved via adoption of acceptable solutions or through the use of alternative solutions

alternative solutions^e

- innovative solutions that vary from the specifications of acceptable solutions
- must provide level of performance at least equivalent to that of acceptable solution being replaced as clarified via the objectives and functional statements

Sources: ^a Canadian Commission on Building and Fire Codes, 2003; ^b National Research Council, 2000;

^c See Foliente, 2000; and, Meacham et al., 2005; ^d Archer, 2005; and, National Research Council, 2003b; e National Research Council, 2003b.

involved in the construction process were unsure of how to meet the new performance based

code and strongly desired the return to the old "cookbook" (prescriptive) approach (Australia and New Zealand are other examples; Interview with Ontario government official, 10 September 2009; Desserud et al., 2003). Given these facts, Canada adopted a more evolutionary approach with its 2005 National Code and adopted an objective-based code.

Objective-based codes:

- clearly state the objectives of building design and construction (Objectives);
- describe what must be met to achieve the objective (Functional Statements);
- provide Acceptable Solutions (Archer, 2005).

As Archer states, "[a]n objective-based code doesn't care if the solutions are prescriptive or performance" (2005: 18). The 2005 National Code reflects this fact in that Code compliance can be achieved in one of two ways. First, the prescriptive elements of the previous Code were kept which affords building officials the opportunity to carry on "as usual". Alternatively, Code compliance can be met by following the objective-based process as shown in Tables 1 and 2. In essence, contractors need to present evidence to building officials documenting how their proposed solution meets the minimum prescriptive requirements. In reference to Part 8 – Sewage Systems of the Ontario Building Code, further discussed below, contractors could either follow the prescriptive requirements detailing the specific length, diameter and quality of pipe required to disperse treated effluent or they could propose an alternative solution such as the use of smaller diameter discharge pipes for effluent yet install more of them (e.g. three instead of one) which collectively meet or exceed the prescriptive requirements. Building officials can sign off on the proposal if satisfied that the evidence presented is sufficient in support of meeting the basic objectives of the Code (e.g. protect public health). Hence, the discretionary powers of building officials were increased with the 2005 national code changes, a model code which

Ontario adopted in 2006. This provides a unique opportunity to examine how changes to discretionary powers have been initially embraced.

Table 2 Sample Acceptable Solution, Objective and Functional Statements for minimum clearance distances for treatment units as part of Class 4 & 5 Sewage Systems (septic tanks, holding tanks)	
acceptable solution	• minimum 15m clearance required from a water well, lake, pond, river, stream for sewage treatment units (OBC Division B – Part 8, Table 8.2.1.6.(1) – Minimum Distances for Treatment Units))
objective	• OE - Environmental Integrity: "limit the probability that, as a result of the design, <i>construction</i> or operation of a <i>building</i> , the natural environment will be exposed to an unacceptable risk of degradation" [original emphasis] (OBC Division A – Part 2 Table 2.2.1.1-Objectives)
functional statements	• F110 – "To control the release of contaminants into <i>soil</i> , <i>groundwater surface water</i> and air." [original emphasis];
	• F112 – "To provide adequate treatment of <i>sanitary sewage</i> and <i>effluent</i> ." [original emphasis] (OBC Division A – Part 3 Table 3.2.1.1-Functional Statements)

The successful implementation of a Building Code, and especially one that has been recently updated, relies heavily on having capable building inspectors. In Ontario's case, changes occurring at the national level complemented its own Code review process which included mandatory qualifications for building inspectors. Initiated in 2000 by the Mike Harris Conservative government, The Building Regulatory Reform Advisory Group (BRRAG) was formed and charged with examining:

- how new construction was reviewed, approved and inspected in Ontario
- the sufficiency of current accountability provisions
- the overall enforcement and administration of the Code

 and, developing implementation plans for any recommendations (BRRAG, 2000).

Representatives from all major stakeholders⁴ were included in the Advisory Group which issued its report in July of 2000. Recommendations were far reaching and included training and certification standards for most stakeholders (e.g. architects, engineers, building officials), limiting liability to ten years after the issuance of a Certificate of Occupancy and streamlining the regulatory process (e.g. set time frames for the issuance or permits, cost recovery) (BRRAG 2000).

The mandatory qualifications for building officials were significant. It was recommended that Chief Building Officials and Building Inspectors⁵ take and pass (min. 70%) Ministry of Municipal Affairs and Housing exams⁶ related to the Building Code. Up until this time, mandatory qualifications did not exist; rather, building officials could *voluntarily* be certified through various industry associations. In other words, given the lack of mandatory qualifications, Ontario municipalities, long charged with building code inspection functions, could hire anyone for the position of building inspector, even someone with no previous background in the field (Short, 2004). However, municipalities typically opted to hire contractors or retired building contractors and relied on their experience as a guide. In other words, experience had taught them "what did not fall down before likely will not fall down again", a principle they followed in carrying out inspections (Interview with Chief Building Official). Though controversial to many groups, especially the certification and training standards for architects and engineers (for a sample see Ontario Society of Professional Engineers, n.d.; Smith, 2001)⁷, most recommendations were adopted by 2006 with minimal

changes (e.g. liability limitations were increased to fifteen years; see Short, 2004) and later blended with the national code to become the 2006 Ontario Building Code.

Methodology

This study examines how Southwestern Ontario building officials⁸ have embraced the increased discretion afforded to them with the 2006 changes to the Ontario Building Code and the effects on its implementation in relation to Part 8 of the Code—Sewage Systems. Not only was the Ontario the first province to adopt the objective based Code in 2006, Southwestern Ontario consists of a dense rural and cottage population bordering Lakes Ontario, Erie and Huron, as well as, Georgian Bay which are reliant on private sewage systems, also known as onsite wastewater systems or septic systems, the importance of which is further discussed below.

The research is purposely limited to Part 8 – Sewage Systems of the Code given the overall Code's breadth and complexity. A focus on its entirety would be inappropriate due to the expansive research design required and due to peculiarities in building system components for the various Code sections. For instance, public and environmental health and safety risks from the use of increased discretionary powers are very different depending on if one is trying to address water hammer in plumbing systems, roof framing systems or sewage systems. Hence a narrow focus on one part of the Code is warranted yet such a focus means that the research findings, profiled below, are not intended to be generalizable to other parts of the Code.

Part 8 – Sewage Systems of Ontario's 2006 Building Code is also an interesting study given they are an integral building component for 25% of Canada's population—largely rural and cottage property owners (Canada Mortgage and Housing Corporation, 2005). A properly functioning septic system minimizes contamination of groundwater, lakes and rivers from bacteria, viruses and nutrients. This is achieved by the separation of liquids from the solids in

the sewage. Natural biological processes break down the solids with the remaining clarified wastewater flowing into a leaching bed. This is a network of perforated pipes in a sand and gravel bed that provides natural filtration and biological decomposition as the wastewater percolates into the surrounding soil (Canada Mortgage and Housing Corporation, 2005; Hammond and Tyson, 1991).

Yet malfunctioning septic systems pose serious threats to water resources. These threats include discharges of high levels of nutrients such as phosphorous and nitrogen. In lakes and streams, these nutrients are major causes of algal blooms eventually leading to decreased levels of oxygen in the water which is detrimental to various aquatic species (Gillis, 2001). For humans, it has long been know that the consumption of water with high nitrate levels can lead to methemoglobinemia in infants ("blue baby syndrome"; US Environmental Protection Agency, 2009; for an early profile see Zwick and Benstock, 1971, 14). In addition, faulty septic systems can release heavy metals and significant viruses and bacteria such as hepatitis and meningitis, as well as, others leading to various health effects such as stomach aches, diarrhea, and infections of the eye, ear and throat (Gillis, 2001; Nantel, 1995). Historically, faulty septic systems have been a major contributor to beach closings in Southwestern Ontario (UTRCA, 1989).

The fact remains that a properly constructed septic system has much to offer efforts to protect both drinking sources of water and the broader environment. This is something for which building officials exercise significant control. Hence, Part 8 - Sewage Systems of the Code was examined to understand how increased discretion has been initially embraced by building officials to understand and improve the policy's implementation so that public and environmental health may be improved. This task is even more important given conservative

estimates of septic system failure rates are 20% while other studies paint a much bleaker picture with failure rates as high as 75% (Georgian Bay Township, 2000; and Gillis, 2001 respectively).

A qualitative research approach was used to give voice to building officials in order to facilitate an understanding of events as how they have experienced it. Twenty-five building officials from different municipalities were contacted for interviews with eighteen interviews conducted in the summer and fall of 2009. This was approximately 3.5 years after the 2006 changes to the Code took effect. Eleven of these interviews were with Chief Building Officials (CBO) who had one or more subordinate Building Inspectors that reported to them. The remaining seven interviews were with Building Inspectors upon referral by the CBO. As it happened, these referrals were unavoidable. Some CBO's were either inundated with work—summer being their busy season—and therefore unable to discuss matters or were more comfortable referring me to their "designated" septic system inspector to answer questions. The referrals may have but did not result in a biased sample of building inspectors being interviewed. Officials were still with the selected municipality for interviewing and were all Part 8 – Sewage Systems inspection certified. Moreover, their responses to questions were consistent across the board with non-referral interviewees.

Interviews were semi-structured and averaged fifty minutes in length. Building officials were asked a standard set of questions. These revolved around the 2006 changes to the building code, their perception and use of the added discretion and training received in regards to the Code changes. They were also asked about their perceptions to and the legalities of green technologies such as composting toilets to gauge how they would use their discretion. Interviews were transcribed shortly afterwards. It is from these transcriptions that a content analysis was conducted.

Research Findings

Three main themes emerged from the content analysis and are first discussed: perceptions towards the Code changes, limited flexibility with the 2006 changes and liability. At the root of these themes (especially liability issues) are several factors which are then briefly profiled including training issues, sources of information, and funding and expertise. The last section examines how the 2006 Code changes has or has not fostered innovation as related to "green technologies" such as composting toilets. We begin with a brief overview of the 2006 Code's complexity.

Complexities and Code Implementation

The 2006 Ontario Building Code is a complex document. The text itself is a two volume compendium with each volume being approximately two inches thick. This does not include supplementary guides and amendments, a fact not lost on one official who stated "it takes a flatbed [truck] to take it out into the field." The main sections of the Code that apply to onsite waste water systems are Part 8 - Sewage Systems pertaining to system design and installation, Part 11.4 pertaining to the impact of renovations on system performance and Supplementary Standard SB-5 which documents approved sewage treatment units. Collectively, these sections comprise less than 100 pages of the Code, a relatively "insignificant amount" as one official noted. He continued,

[w]hat is important is the fact it is poorly integrated with the other sections of the Code. You have to read the Code as a whole document, not on a piecemeal basis. Most people out there don't do this. What is allowed in Part 8 is not necessarily allowed when you read the other parts. That is the problem.

This view was repeated by others in that some officials felt the province was trying to do too much with the Code. This was evident in relation to pending legislative changes mandating periodic septic system re-inspections. As one official noted,

The province needs to resolve how the rest of the sections of the Code relates to Part 8. Now, they are trying to marry [septic] re-inspection to Part 8. They have taken the building code Act and are trying to include different types of purposes to their job. The thing is, they are bastardizing the Act. They are muddying up the building code....using it in ways not meant to do. Basically, they are trying to have a square peg in a round hole.

These views were not shared by all officials. A number thought the fit with the rest of the Code was "good" or "very well". As one noted, "for rural areas, [people] used to go to the CA [Conservation Authority] or the Health Unit for approval. Now it is a one stop shop. It's good for the municipality too as it operates on cost recovery. We, here, actually make money on it. That's good." The "one stop shop" theme was noted by a second official as an "excellent" idea. As a footnote, both of these officials were senior inspectors, a fact we will return to later. While seemingly positive from a service and economic perspective, one official questioned "if we really understood how the [20]06 changes work. There is a time element at play in there that is not readily identified or talked about." The official was referring to the length of time needed to obtain approvals through the objective-based process which is undefined but is admittedly "a slow process...[which] typically takes months and is expensive." It is this dichotomy in how the Code was viewed that permeated most discussions with officials. They either questioned the interpretation and functioning of Part 8 – Sewage Systems in regards to the added discretion they now had or in relation to the rest of the Code, or, they welcomed the 2006 changes as simplifying and legitimizing the approval process and potentially stimulating innovation.

Initial Perceptions to Objective-Based Process–Mixed

Since 2006, building officials in Ontario have had a choice in how to interpret the building code. They can continue to interpret the Code on a prescriptive basis or they can follow the objective-based format and accept alternative solutions to compliance provided such alternatives meet the basic Code objectives. Building officials had mixed feelings about this new format.

Some officials were apprehensive about potentially setting a precedent for the rest of the province. As one such official stated:

The building code ensures the same rules across the province...but at the municipal level for Part 8, a large corporation can come into a small municipality to look at alternative means. They want the municipality to approve their system. If they get the approval, they can then ask to get it across the province as they can say "Got it here, so why not up here too?"

Others had no apprehensions at all stating "municipalities [were] quite well versed on matters." Some officials did not see the point of the objective based process in relation to Part 8. They questioned

why [one would] put anything into it if only for one system and not confident it would work. Why build it given the fact the first one is the most expensive to build and the approval is only for one site? [The] [o]bjective process is a lot of good as an alternative but [I] doubt [it] will ever get used a lot.

Another official also questioned the site specific designation with use of the objective based process. As he stated, "we already have a number of BMEC [Building Material Evaluation Commission] approved units which is a provincial approval and is in the Code, so why go for a "one-off situation"?" This turned out to be an important point as another official emphasized "most inspectors don't want to see new treatment technology. We want to make sure it meets Ministry approval, so go through the BMEC approval process."

Officials also questioned the objective-based process saying that the process was "quite technical" and that "you must meet the objectives as defined in the functional statements." One

official was more direct stating "you have to prove beyond a reasonable doubt that the alternative meets them [objectives, functional statements]."

Others were more positive in their outlook stressing the potential innovative benefits and procedures to be followed as the following comments from three different officials illustrate.

In a way, the objective [-based] process is good as manufacturers get sites, get data, to see if new systems work. It is better than their field sites where conditions do not match actual homeowner sites where homeowners put in stuff [in their systems] such as bleach, medications.... This way they get actual real sites and can monitor to see how new systems work.

If people want to do something different, we can possibly do it. We have a process to follow to approve.

We now have a process outlined to propose alternative solutions. In that way, it [the Code] is clearer and easier.

The above initial mixed perceptions are not necessarily unusual given the "newness" of the Code. Additional time may be required to pass for officials to become familiar with the Code changes given none of those interviewed had used the objective-based process in relation to Part 8 of the Code. Yet this also suggests officials are risk-averse even when given expanded discretionary powers thus limiting the potential of Ontario's objective-based Code to spur innovation and increase competitiveness.

Limited Flexibility

A minority of officials noted that there has been no increase in flexibility in moving to the objective-based Code. Of significance is the fact these officials were all older building officials and they were adamant in their position. One flatly stated,

[l]ook, if you are interested in the [20]06 changes for Part 8 and how flexible, forget it. You are wasting your time. There have been no changes and there is no more latitude or anything except for a couple of minor things such as the need for effluent filters on tanks.

Another admitted that while the Code may have changed, "there is no difference to Part 8." In essence, there was "no increased flexibility."

To test the degree of flexibility, all interviewees were asked the following question based on a hypothetical example: "In regards to clearances to installing a leaching bed, if the Code requires 30m clearance from a particular object [e.g. water well] and the applicant only has 26.5m, do you as a building official have the flexibility to accept 26.5m?" As a follow-up question, all interviewees were asked the same question again but the discrepancy in distance was narrowed. The question read as follows: "In regards to clearances to installing a leaching bed, if the Code requires 5m clearance from a particular object [e.g. structure] and the applicant only has 4.7m, do you as a building official have the flexibility to accept 4.7m?"

Officials that had indicated the lack of flexibility with the new Code all responded in a similar unwavering manner. To them, "The Code is *very clear* on what is needed [their emphasis]" and that they are "not here to make exceptions." In other words, "[t]here is *no leeway* [their emphasis] save for "those based on rulings from the Building Code Commission rulings which are "one-offs" [site specific]."

These views were not shared by the younger officials who believed they had more flexibility. They all noted they had the flexibility to accept the lesser clearance. One went so far as to say, "I face this constantly. Many systems should never have been allowed in the first place, but at least they are upgrading. Something is better than nothing, especially if they are [currently] using a 45 gallon drum which there are a lot of out there." Whether or not one had the flexibility to accept a reduced clearance was also related to experience in the position. One official said "If it's a "newbie" [new inspector], no. They are not experienced enough to trust their judgment. They must follow the book." This is interesting given the fact another official

noted that "you will likely find older guys with 25-30 years experience have a high confidence level. They have been making decisions all along and are used to making judgment calls anyway. These guys will use the flexibility." While experienced, the data here suggests that these more experienced inspectors are narrowly interpreting the Code.

Younger inspectors vary in the degree of flexibility they utilize. Some are quite conservative in their interpretation of it stating they "only have flexibility when have unique conditions such as is the case for reduced clearances for leaching beds." They also have the flexibility to try "green alternatives" such as composting toilets "under various conditions." Another official went further and noted that he

[has] one installer who likes to use a system that works really well and is reliable but it is not classified as a tertiary system which are systems that require a smaller bed [uses less area]. I grant the ability to use it with smaller bed sizes as if it is a tertiary system for upgrading existing units even though it is not a tertiary system. Listen, it is simple. If you are dealing with a one compartment tank [multi-compartment septic tanks are required by Code] or a 100 gallon tank or a 45 gallon drum...it is an improvement and you go with the improvement.

These younger inspectors also noted that with the increased flexibility, there was "more pressure to make a decision. It was nice when it was black and white, sentence 8.2.1 says no. Now, with alternative solutions, lots of pressure there." They were also the ones to note the human and economic costs which factored into their decision making matrix. As one official explained, "if it's going to cost \$30-40,000 to fix and it's a small business, they may go bankrupt. Need balance. Hard to get into compliance at times but you just don't hurt the owner, there are other costs, his workers, family...". A similar problem exists for seniors: "What do you do if they are seniors and on a fixed income. Need to look at the big picture."

One younger official clearly summed up the situation and is quoted at length as follows:

I want to be clear on two things [their emphasis]. First, the Code is as lenient as the people enforcing it. Right now there is a huge discrepancy that exists between jurisdictions. What one jurisdiction will accept as meeting Code another will not. The second is that the Green Energy Act may come into play to level the playing field over time. If the province designates goods and services, for example composting toilets, they supersede our [municipal] interests. It overthrows all local by-laws for that subject in question. Thing is, nothing has been designated yet in relation to Part 8 of the Code. This may level the playing field.

Indeed, time may yet reveal whether the playing field is levelled. Yet time will also bring in a new crop of building inspectors. It remains to be seen whether the existing younger inspectors become more rigid in their interpretation of the Code as time goes on in light of the lessons added experience may provide. Also of note is the fact that while specific questions were asked (and answered) to test the degree of discretionary power, close to ninety per cent of officials interviewed provided examples of when they would use such latitude as the above quotes indicate.

Liability

Liability issues loom large for building officials as most openly stated, "It's all about liability". While they may have increased flexibility to accept alternative solutions, they, acting on the municipalities' behalf, remain responsible for such decisions should something go wrong. As one official stated, "It is the municipality that has the deepest pockets. We always get named in any [law]suit."

Building officials are uneasy with the "complexity" and "vagueness" associated with the objective-based process. Inspectors "are used to [the] more prescriptive part of [the] Code, for example, the length of a nail or the length of a pipe. The objective process does not tell us how objectives are to be met. It's vague and we are not used to that." One official noted how they

went through the objective-based process at one of their Ontario Building Officials Association Chapter meetings, "[a]ll inspectors in the area were there, 100 per cent attendance. We went through the process of alternatives. It's complicated and vague. Feeling was with all the people there was "stick with the traditional Code"."

Inspectors clearly "do not like the added liability". As such, they "tend to stay with prescriptive formulations and not allow for or follow objective-based options." The objective-based process is either discouraged or high thresholds for its use are put in place as can be seen in the following comments from different officials:

[I]f one did go through objective based process, I would put a rider in the agreement or approval that if the system does not work, they would have to dig it up and install a new system. I would do this to cover my butt but also to discourage people from going through. In the end the liability is on me. I have to cover my butt.

I would use it [the objective-based process], but *only* with a complete engineering stamp and certified CSA [Canadian Standards Association] or MOE [Ministry of the Environment; original emphasis].

I would require a very deep analysis of what putting in [system] including engineer's reports, peer reviews, Ministry comments....At end of day, so onerous, not worth it.

This high level of documentation demanded by officials proved hard to obtain. For instance as one official noted,

I would need a full engineering review with a letter from the engineers stating what proposed meets the objectives. Problem is, not too many engineers will do. Rather, they will say the proposed system is "in general conformity" with the Code. *Not good enough!* This is not the same thing [original emphasis].

The above quotes reveal a very real concern building officials have in regards to liability issues and use of the objective-based process to obtain Code compliance. One official likened it to a salesperson selling a product in that, "[t]hey need to sell me a product [they are] trying to utilize or install...and prove to me [it] can meet the objectives and functional statements."

Moreover, as a building official flatly admitted, "I am very leery about alternative solutions. I am not an engineer. I will be even more leery when a couple of systems do get approved via the objective based process as will likely mean a flood of applications for more."

Given liability issues, a high level of documentation may be warranted, something many building officials were frustrated with as one official revealed: "We have to have reasons why we say no now. Seems like I have to have my stuff more documented and have more proof than what applicants give us." These comments were echoed by another official who painted a vivid picture for failing to do so. As they stated, "I want to be fairly certain I follow certain procedures. I need to make detailed notes in case it goes to court. It can be a lonely place if sitting in court."

Several factors that underpin liability concerns were revealed in the interviews. These included training, sources of information, and, funding and expertise each of which is briefly profiled.

Training

Continuing education is one tool that can be used to update building officials on Code changes. Increased knowledge of Code requirements and processes may help address building officials' apprehension towards use of the objective-based process. The Ministry of Municipal Affairs and Housing (MMAH) designed several "transition training" modules to be delivered largely by associations such as the Association of Chief Building Officials of Ontario. All building officials noted that a number of training sessions were held across the province. These were usually one day in length and covered the *whole* Code, not just Part 8 – Sewage Systems. While generally "satisfied" with the training, it was noted that more "transition training" was required given costs involved and the fact not all inspectors can attend a session at any one time. This

appeared equally important for smaller municipalities who often only have one inspector and for larger municipalities who cannot afford the time to send all of their inspectors.

Sources of Information

Particularly revealing were the information sources building officials referred to when they had questions. *All* building officials stated that they contacted their peer group—other building officials and academics (e.g. Ontario Rural Wastewater Centre). As one official stated, "by talking to these people, I feel I can cover 99.9% of all questions I have." Others noted they do not hesitate to talk directly to installers:

I will use local contractors here too. They are a good resource and are trying to stay up on changes. We are lucky here. We have a number of installers who have been installing systems for decades. These are family run businesses handed down. They are quite knowledgeable on the environment and land in the area. They are quite capable of designing the best fit and work into the environment for balancing the Code and residents.

This last quote may be cause for alarm given the fact the regulator is seeking advice from those being regulated for how to comply with the Code. When probed, the official noted "They are the experts in it. Listen, installers receive the same if not more training in the material than we do given the previous changes to the Code in 1998. Installers have really come a long way." Another official felt septic system installers were "the best trained "trades people" of any in relation to the Code. The Ministry has done a really good job with these people over the past ten years." Both of these officials were referring to mandatory certification for onsite waste water installers and designers instituted with the 1997-1998 changes to the Code.

The Ministry of Municipal Affairs and Housing was a distant second as a source of information. Building officials can call them directly even if one often has to leave a message. Not to worry though as one wryly noted "they *do* return your calls eventually [their emphasis]

[and]..the MMAH has gotten better over time." More problematic is the fact building officials never seem to be able to obtain direct answers to their questions. It appears Ministry officials may be fearful of liability issues themselves as one official stated,

You can talk to the MMAH. They are of some help...but they are careful not to give a strong interpretation for fear of liability reasons. They don't want anything coming back on them. They want the local municipality, me, to make the call, so, they advise but you don't always get a clear answer.

Another official was emphatic in stating "the reality is, rarely do they know the answer." Only one official stated they like contacting the Ministry for questions. They felt their web based process entitled "Ask A Building Code Question" (see MMAH, 2009) "worked good and was pretty fast too." They did, however, reserve judgment as to the quality of the answers given.

Funding, Expertise

Funding and expertise are two sub-themes that permeated liability issues. While generally satisfied with the "transition training" received, building officials remained skeptical about the objective based process. They also primarily turned to each other when looking for guidance and to answer questions which have largely worked to reinforce their "conservativeness". Funding issues and the lack of expertise further complicated matters. Several inspectors simply did not want the added workload of going through the objective-based process. In the words of one such official, "I only have so many hours in a day. That process, it's a ton of paperwork. How am I supposed to understand all that. I am not an engineer!" A similar point was made by another building official in stating:

The province allows for all this stuff [alternative solutions], but how am I supposed to keep track of all of it? As a one man show in a small rural municipality, I only have so much time. The problem is the workload is increasing every year. Every new [treatment] system that comes out is another

one to keep track of. When is the province going to listen to the municipalities?

Funding issues remained of prime importance to building officials. Several noted that they were "stretched" to cover costs and felt necessary fees could not be raised in the short term. In the words of one official,

[we] review fees from time to time to ensure they are adequate for the time spent inspecting and doing the reports. At times, we rely on other permit fees to contribute to the cost recovery if not enough...but we are in a bind at times. When do you raise fees? It's not good in a recession. It is really hard to raise fees in an economic downturn.

This is a problem many officials fear will get worse with pending mandatory septic system reinspections. Several noted the need for provincial funding of some form yet felt frustrated at the lack of information and direction the Ministry has provided to date:

Re-inspections are going to be expensive. We will have to hire at least one full-time inspector...but the province needs to ensure funding for assistance or a tax rebate or something. We are waiting for more Ministry direction right now...but have heard nothing.

Another official expanded on the complications with re-inspection programs:

There are a lot of systems out there. We will require teams of inspectors. The only way to ensure compliance is to dig up the system to examine the stone, tank sizes, slope, headers....are all correct. A simple visual inspection without digging up the system is useless. You can't see the system, it is underground so you're gonna have to dig it up. It will be expensive and people aren't gonna like this. I'm wearing a bullet proof vest when this comes in [mandatory reinspections].

Given such a framework, it appears matters may worsen in the short term and may introduce safety concerns for inspectors. Several officials held out hope that re-inspections would be subcontracted out to the private sector thereby reducing their role to one of warehousing and managing the information generated and of Code enforcer for those initially unwilling to comply. Other municipalities have taken a proactive approach adopting voluntary re-inspection programs

in the hope a "soft approach" will soften the transition to the province's future mandatory program or to deal with local "hotspots"—areas of concern to the local municipality. Funding for such programs from outside sources has, however, typically been "scarce to non-existent".

The 2006 Code and Green Technologies

A prime reason for the move to an objective-based Code in 2006 was to foster innovation. In regards to onsite waste water systems—septic systems—one such innovation is composting toilets. Composting toilets arguably date back to the 1860s (Composting Toilet World, 2009). They operate on a simple principle: Human wastes are deposited into a chamber located either directly underneath the toilet or in the basement where they are composted. The composting process kills harmful bacteria and turns human waste into a safe useable product "similar to topsoil" that can be used in one's landscape (Clivus Multrum, 2009). Thus, composting toilets potentially allow for superior environmental performance.

Composting toilets are an approved "sewage system" (Class 1) under the Code. If water is added to the compost to facilitate the composting process, a regular Class 4 sewage (septic) system is required to dispose of the wastewater portion of material ("blackwater"). If no water is added, that is, the toilet is "dry", a Class 2 sewage system (greywater) is required given the fact no human waste water will be delivered to the system. In other words, only water from the kitchen sink, showers and hand basins is handled by a greywater system (see OBC s. 8.3). This distinction is an important one in relation to costs and lot sizes. A dry composting toilet and greywater system leave a much smaller "footprint" overall (up to one tenth smaller depending on the number fixtures and bedrooms in a building). That is, less land space is utilized. Thus, such systems can potentially be used for small lots such as those commonly found in cottage areas. In comparison, a regular Class 4 sewage (septic) system requires a much larger land area making it

unsuitable for many small properties (e.g. cottages). Hence Code compliance is compromised in many instances. For example, interviewees noted that many cottages in their areas either had a steel 45 gallon drum as their septic tank/system which is not Code compliant or relied on holding tanks which need to be periodically pumped out which presents other challenges (especially in the winter).

Interviewees were asked about their perceptions towards and knowledge of composting toilets. As a green alternative, the potential exists for added protection of water resources given the neutral nature of the finished compost. This is far superior to traditional septic systems. Given their legality, environmental benefits and the move to an objective-based code thus allowing for alternative solutions, how such green technology is dealt with by building officials becomes important and can have major environmental impacts. To be clear, composting toilets are Code compliant and therefore do not require the objective-based process. However, the objective-based process provides applicants with an alternative route to meeting Code requirements which may be important if resistance to such "green technology" exists among building officials.

Responses from building officials were mixed. Approximately one third stated that they were aware of composting toilets, that they were Code compliant and that their experience with them was mixed as some of their comments revealed:

Never had any applications. They [composting toilets] are in the Code. Never dealt with them other than know they are covered in the Code. They're new. Can be good for "maxed out" sites to reduce overall volume in a system. If got application, would go through objective based process and review requirements to match up to what proposed.

Yeah, we have a few of them in the municipality but only in the seasonal areas. They were permitted since before the [20]06 [Code] changes.

Yes, we have some in [our area], not many. They are allowed by the Code.

Approximately another third of the building officials noted they "new nothing about them". When probed to see how they would be handled as part of an application, one official said, "...not sure if they are allowed" while another stated "I would really have to look at it closely."

A final third set of interviewees were adamantly opposed to composting toilets. They wanted nothing to do with them, tried to influence people to not install them or provided false or misleading information.

They stink! You don't want that. They are just trouble. You still need a regular Class 4 sewage [septic] system with them [This is false as per 2006 Code changes]. I had one guy with one and he ripped it out a few weeks later. It was terrible. You really don't want anything to do with those.

Other officials clearly recognized their legality yet still tried to steer people away from their use, some of who were concerned about liability:

Yes, such stuff is allowed by the objective-based Code. I see very, very few of them. Quite frankly, I discourage people from using them.

I really frown on them. I use them for island properties. A few people have asked about them; I say no. This has, to date, stopped them all. If they pushed it, yes, they could have it...are Code approved but where do you dump the compost? There is no way to track it at the end of the day. It's all about liability.

One official did not see the point of composting toilets and did not want to allow them although he noted he would have to consider them to ensure proper procedures were followed:

Composting toilets are allowed for existing stuff like if you're putting one in your pool shed. But not for new stuff. Why build a new home and not have amenities with a proper toilet system in there? What people building up here are high end stuff, not cheap, so why want [composting toilet]? You can't do it for a new home anyway. If pushed I would have to take a closer look. Last thing you want is to be in front of a review board.

The above responses from building officials are revealing in that they highlight the main themes from the interviews. Liability concerns, among other things, lead many officials to narrow interpretations of the Code and thus negative views of composting toilets. Much effort is also directed at providing misinformation or trying to convince applicants to install a regular septic system. Only with much persistence will people succeed in having the product installed, an odd finding given the fact composting toilets are Code *compliant* to begin with.

Citizens will also likely need to become educated on the Code themselves in order to succeed in their application. They may contact the province for help in this regard via the Ministry's "Ask A Building Code Question" electronic resource. This is the same resource building officials may use to contact the Ministry with their questions. For example, this author submitted a question in regards to the legality of installing a Class 1 sewage system (dry composting toilet) in combination with a Class 2 sewage system (greywater system). The Ministry's response, which arrived in a timely fashion approximately 1.5 days later, directed my attention to section 9.31.3.2 (2) of the Code where it states cold water piping must be run to every water closet. They also further stated that it was up to local municipalities to accept alternative solutions given the fact that under the Building Code Act, it is municipalities that have jurisdiction for Code enforcement (see note 3 for further clarification).¹¹

Yet, the value of the Ministry's advice is questioned and highlights the lack of congruence of the other Code sections with Part 8, Sewage Systems, something which many building officials pointed out (see above). The basic problem is the fact a composting toilet is not a water closet, it is a sewage system and Code compliant, a point three building inspectors, as well as, a senior Ministry official pointed out during interviews. It is also interesting that this information was given by a Ministry contact, one of the *same* contacts to which building officials

have access. The redirection to local building officials also verifies what local officials revealed in the interviews; Ministry officials are concerned about shedding liability themselves and "rarely do they know the answer" or "you don't always get a clear answer." This leaves the average citizen desiring a green alternative, not to mention building officials who seek clear direction, with a lot to be desired. To be sure, the question was rephrased and re-submitted to the Ministry by the author 5.5 months later. The same answer was received, again, in a timely fashion (24hrs).¹²

Discussion and Conclusions

The aim of this paper was to assess how a broadening of discretionary powers was embraced by front line service workers and how this affected policy implementation. The focus was on the initial few years or "transitionary period" following an increase in discretionary power, an area little studied in the literature. However, this time period remains important for developing how such discretion may be used in the future. In other words, it sets the tone for a policy's future implementation. The investigation was applied to the time period immediately following the 2006 changes to Ontario's Building Code in relation to Part 8 – Sewage Systems (first three years). Building officials gained increased flexibility in that they now had two methods to ensure Code compliance: They could follow the existing prescriptive format or could follow an objective-based format.

The results revealed how concerns over liability issues have led to the continuation of narrow Code interpretations. This has, in turn, led to a less than robust view towards the increased flexibility now afforded officials. Uncertainty underpinned liability issues which were related to the sub-themes of education (training, sources of information) and funding and

expertise. These factors were highlighted in relation to composting toilets, a green technology, painting a bleak picture for improving the protection of water resources.

Theoretically, the actions of front line service workers can significantly affect policy implementation as Lipsky long ago noted. Indeed, support in favour of Lipsky's "Street-level Bureaucracy" can be found. Building officials exercise their discretionary powers in enforcing Code compliance by considering the economic and social costs involved. As some officials pointed out, they did not wish to cause businesses to go bankrupt nor did they wish to burden seniors who are often on fixed incomes. Yet the application of this discretion appears to be limited given liability concerns. Officials were clearly fearful of litigation against the municipality, so much so they would obfuscate or mislead those seeking approval for green technologies such as composting toilets. The fact building officials predominantly sought guidance from each other or private industry (i.e. installers) before seeking guidance from the Ministry is significant in that it reinforces existing perceptions which impede innovation. Such results underscore the need for additional educational efforts to facilitate a better understanding of the objective-based process thus potentially reducing liability concerns leading to broader Code interpretations. This education needs to be directed at both building officials and Ministry personnel given both share similar liability concerns.

Support in favour of Moore's (1987) argument in the need to differentiate between different types of street level bureaucracies and the need to consider the street level bureaucrats themselves given their discretionary tolerance levels is also found in this study. Building officials have much less discretion than many of the studies in the literature which focus on social welfare agencies. The liability issues involved are simply greater in relation to building officials. If something goes wrong, municipalities usually get sued, sometimes years later. This

is not typically the case with social welfare agencies where they typically dispense "goods" (i.e. benefits). Yet, the need also exists to go beyond simple comparisons between regulatory and non-regulatory agencies to one examining differences *among* regulatory agencies, as well as, *among* non-regulatory agencies and associated discretionary levels. This study contributes to such an analysis (the former). For instance, the discretion offered building officials, used in this study, and Lipsky's "cops on the beat" is very different as are the liability issues involved. "Cops on the beat" may very well break up a fight and not charge those involved which may lead to increased violence between the parties at a later date. Even if charges are laid at a later incident, the "cops on the beat" do not typically face lawsuits for their reluctance in laying charges at the initial incident. Such a luxury is rarely afforded to municipalities whom building officials represent. It is worth remembering the comments of one official, "[i]t is the municipality that has the deepest pockets. We always get named in any [law]suit."

This study also contributes to understanding differences among street-level bureaucrats in relation to their discretionary tolerance levels, Moore's second point. Differences in the level of flexibility offered building officials with the 2006 Code changes were revealing. Older and more experienced officials were adamant in stating that there were no differences while younger and less experienced officials saw matters differently. They noted and accepted the increased flexibility yet this did not necessarily lead to broader Code interpretations. At least, not yet. This may be due to the fact that some younger and less experienced officials were working under the direct supervision of older and more experienced officials which acted as a "conservative" influence. With others, it may simply be the "newness" of the changes that is restricting them. As time wears on, they may very well provide for a broader interpretation of the Code. Yet time can cut many ways in that it may also reveal complexities surrounding liability issues not

previously understood by less experienced officials therefore reinforcing narrow Code interpretations.

One also has to question the comments made by older and more experienced officials. Perhaps they have long been interpreting the Code broadly regardless of the "written word" in order to meet the realities they face in the field. The 2006 changes to the Code may simply be legitimizing what they have been doing all along. As such, no increased flexibility is perceived by these individuals. When probed, however, officials provided little information in order to be able to assess this view.

Of particular interest is the paper's focus on the first few years immediately after discretionary powers have been enhanced, termed a "transitionary phase". This period is very important in setting the tone for a policy's implementation and is little studied. The results contained herein suggest that early recognition of implementation difficulties followed by appropriate corrective measures can go a long way to ensuring effective Code implementation in order to foster innovation and competitiveness. Future research can examine this important "transitionary phase" in other street-level bureaucracies. This may include situational settings where regulatory bodies share liability to ascertain differences and how such differences impact policy implementation. Research assessing educational levels, training and experience of street-level bureaucrats themselves would further unravel discretionary tolerance levels.

Moving forward, it appears innovation may remain stunted until liability issues are resolved. Municipal overtures for provincial guidance are currently rejected. Building officials are largely turning inward (i.e. to each other) to resolve issues which reinforces narrow Code interpretations. Educational efforts directed at both building officials and Ministry personnel may help overcome some of the fears surrounding liability issues, lead to a fuller understanding

of the flexibility offered by the 2006 Code changes and lead to "healthier" perceptions held by building officials towards the Code. Public education and pressure, especially in regards to demanding green alternatives, may also help. As one official noted, "[t]he public is not asking for this stuff, only a couple of people here and there. If more were asking for it, well...." Without such efforts we will continue to flush public and environmental health away and lose an opportunity to enhance the protection of drinking water sources. The current patchwork quilt method of Code interpretation or "build it...if you *can*" mentality that has emerged leaves much to be desired.

Broadly speaking, it is this resistance by building officials—street-level bureaucrats—that may have implications for the efficacy of New Public Management (NPM). Two of the fundamental tenets of NPM are to decentralize and cut red tape thus contributing to an efficient, effective, cost-conscious and flexible bureaucracy in order to foster a more innovative "climate" (Aucoin, 2002; also see Osborne and Gaebler, 1992). Indeed, the prime reason for moving to an objective-based Code was to foster innovation and increase competitiveness. Yet one questions the ability to achieve such goals given the fact building officials have not embraced the increased discretion afforded to them. The question remains: To what good are increases in discretionary powers for street-level bureaucrats given, as the research findings indicate, street-level bureaucrats can act as a significant "brake" on the neo-liberal agenda?

Notes

- This is different than administrative discretion where one has the ability to organize their daily work schedules and which is not the focus of this paper (see Carroll and Siegel, 80-85).
- The other national codes are the National Farm Building Code, the National Housing Code and Illustrated Guide, the Model National Energy Code of Canada for Buildings and the Model National Energy Code of Canada for houses (see National Research Council, 2003a).
- 3 Since 1975, the Ontario provincial government has adopted building regulations while delegating responsibility for Code enforcement to municipalities. Prior to 1975, municipalities both adopted and

enforced their own building regulations. Responsibility for onsite wastewater systems (septic systems) has an interesting history. Prior to 1997, only Ministry of the Environment *guidelines* existed in relation to onsite sewage systems (septic systems). Furthermore, oversight for these systems moved back and forth between Conservation Authorities (Ministry of Natural Resources), County Health Units (Ministry of Health) and the Ministry of the Environment. The Ministry of Municipal Affairs and Housing assumed responsibility for septic systems in 1997 and incorporated the MOE guidelines (virtually verbatim) into the building code as Part 8 – Sewage Systems. However, their enforcement remains divided between municipalities, Conservation Authorities and County Health Units (see National Research Council, n.d.; Ministry Municipal Affairs and Housing, 2007, 2009).

- Twenty-two stakeholder groups were represented including the Large Municipalities Chief Building Officials, Ontario Building Officials Association, Ontario Home Builders' Association, Professional Engineers Ontario, Association of Municipalities of Ontario, and the Electrical Contractors Association of Toronto (see BRRAG, 2000).
- As per the *Ontario Building Code Act*, S.O. 1992, c. 23 (as amended), the role of a Chief Building Official "is to establish operational policies for" and "to coordinate and oversee the enforcement of the Act and the building code." This includes carrying out inspection functions themselves, if qualified, or the hiring and supervision of Building Inspectors to carry out such functions as "reviewing plans, inspecting construction, conducting maintenance inspections and issuing orders in accordance with the Act and building code" in relation to the area(s) of the Code for which they are qualified (see s. 1.1(6) and s. 1.1 (7) of the Act).
- Building Officials could take various courses in preparation for the exams offered across the province through industry associations and colleges. These courses ranged from 1 to 5 days in length (for example, see Ontario. Ministry of Municipal Affairs and Housing, 2010).
- The Professional Engineers of Ontario challenged the validity of the *Building Code Act*, 1992 given on the basis it conflicted with the self-regulating aspects of the *Professional Engineers Act*, 1990. The Ontario Superior Court of Justice ruled in favour of the engineers in 2007, a decision the Ontario government has chosen not to appeal (see *Ontario Building Code Act*, 1992; *Ontario Professional Engineers Act*, 1990; Association of Professional Engineers of Ontario v. Ontario (Municipal Affairs and Housing), 2007; and, Ontario Municipal Affairs and Housing, 2007).
- 8 To ensure the anonymity of interviewees, their names and the names of their municipalities are not used.
- 9 Interview questions available from author upon request.
- In comparison, only three building officials had used the objective-based process in relation to other parts of the Code.
- The full question and Ministry response available from the author upon request.
- The question and Ministry responses available from the author upon request. I thank B. Timothy Heinmiller for suggesting the question re-submission.

References

Archer, John. 2005. "2005 Objective-Based National Codes." Paper presented at the Project Management Conference, Ottawa, 2005. National Research Council of Canada.

Association of Professional Engineers of Ontario v. Ontario (Municipal Affairs and Housing), 2007.

- http://www.canlii.org/en/on/onscdc/doc/2007/2007canlii17629/2007canlii17629.html (18 March 2010).
- Aucoin, Peter. "Beyond the 'New' in Public Management Reform in Canada: Catching the Next Wave?" In *A Handbook of Canadian Public Administration*, edited by Christopher Dunn, Chapter 3. Don Mills: Oxford University Press, 2002.
- Building Regulatory Reform Advisory Group. 2000 (July). "Knowledge, Accountability, Streamlining: Cornerstones for a New Building Regulatory System in Ontario." A Report to the Minister of Municipal Affairs and Housing from the Chair and Vice-Chairs of the Building Regulatory Reform Advisory Group.
- Canada Mortgage and Housing Corporation. 2005. "Your Septic System." http://www.oowa.org/resources/PDF/CMHCHomeOwnerSeptic.pdf (02 February 2010).
- Canadian Commission on Building and Fire Codes. 2003. "Canada's Construction System....the context for model codes." http://www.nationalcodes.ca (05 July 2009).
- Carroll, Barbara Wake and David Siegel. 1999. Service in the Field: The World of Field Level Officials. Montreal: McGill-Queen's University Press.
- Clivus Multrum. 2009. "Composting Toilets." Leaflet.
- Composting Toilet World. 2009. "History." http://www.compostingtoiletworld.org/history/index/php (15 August 2009).
- deLeon, Peter. 1999. "The Missing Link Revisited. Contemporary Implementation Research." *Policy Studies Review* 16: 311-338.
- Desserud, D., R.J. Hayson, D. Bergeron Arch, R.J. Desserud and J.C. Hayson. 2003. "The Origin and Development of Canada's Objective-Based Codes Concept." Paper prepared for the National Research Council Consultation on Objective Based Codes, 2003. http://www.nationalcodes.ca/publicreview/2003/obc/background_e.shtml (15 June 2009).
- Dunér, Anna and Monica Nordström. 2006. "The discretion and power of street-level bureaucrats: an example from Swedish municipal eldercare." *European journal of Social Work* 9(4): 425-44.
- Elmore, Richard F. 1980. "Backward Mapping. Implementation Research and Policy Decisions." *Political Science Quarterly* 94: 601-616.
- Foliente, Greg. 2000. "Developments in Performance-Based Building Codes and Standards." *Forest Products Journal* 50(7/8): 12-21.

- Georgian Bay Township. 2000. "Septic Systems." http://www.obf.on.ca/obfindex_files/Water%20Line%20Dec%202000.pdf (15 March 2005).
- Gianakis, Gerasimos A. 1994. "Appraising the Performance of "Street-Level Bureaucrats": The Case of Police Patrol Officers." *American Review of Public Administration* 24(3): 299-315.
- Gillis, Sally, 2001. "A Speech by a Septic Dyseptic." October 13. http://www.foca.on.ca/Infobase/Environment/Septic/SepticDyseptic.htm (19 March 2005).
- Hammond, C., and T. Tyson. 1991. *Septic Tank Design and Construction*. Athens, GA: University of Georgia, Cooperative Extension Service.
- Lipsky, Michael. 1971. "Street-Level Bureaucracy and the Analysis of Urban Reform." *Urban Affairs Quarterly* 6(4): 391-409.
- Lipsky, Michael. 1980. Street-Level Bureaucracy. New York: Russell Sage Foundation.
- Lo, S. M., K. C. Lam, K. K. Yuen and Z. Fang. 2002. "An Investigation on the Building Officials' Perception for the Use of Performance-Based Fire Engineering Approach in Building Design." *Fire Technology* 38(3): 271-286.
- Lo, S.M., M. Liu and C.M. Zhao. 2008. "A study on the effect of project coordinators' knowledge on the use of performance-based fire safety engineering design in buildings." *Journal of Building Appraisal* 4(1): 15-22.
- Maupin, James R. 1993. "Control, Efficiency, And The Street-Level Bureaucrat." *Journal of Public Administration Research and Theory* 3(3): 335-57.
- May, Peter J. and Soren C. Winter. 2007. "Politicians, Managers, and Street-Level Bureaucrats: Influences on Policy Implementation." *Journal of Public Administration Research and Theory* 19: 453-76.
- Maynard-Moody, Steven, Michael Musheno and Dennis Palumbo. 1990. "Street-Wise Social Policy: Resolving The Dilemma of Street-Level Influence And Successful Implementation." *The Western Political Quarterly* 43(4): 833-48.
- Meacham, Brian, Robert Bowen, Jon Traw and Amanda Moore. 2005. "Performance-based building regulation: current situation and future needs." *Building Research and Innovation* 33(2): 91-106.
- Moore, Scott T. 1987. "The Theory of Street-Level Bureaucracy A Positive Critique." *Administration & Society* 19(1): 74-94.

- Moore, Scott T. 1990. "Street-Level Policymaking: Characteristics of Decision and Policy in Public Welfare." *American Review of Public Administration* 20(3): 191-209.
- Nantel, Martin. 1995 (December). "Sewage Treatment and Disposal In Quebec: Environmental Effects." http://www.environmentprobe.org/enviroprobe/pubs/ev532.htm (10 March 2010).
- National Research Council, 2000. "What will Objective-Based Codes mean for me?" http://www.chba.ca/membersarea/policy/Codes_what_4_me.pdf (19 January 2010).
- National Research Council. 2003a. "Canada's Code Development System." http://www.nationalcodes.ca/ccbfc/ccds_e.pdf (05 July 2009).
- National Research Council, 2003b. "The Origin and Development of Canada's Objective-Based Codes Concept." Consultation on Objective-Based Codes Background Documents. http://www.nationalcodes.ca/publicreview/2003/obc/background-e.shtml (15 September 2009).
- Nielson, Vibeke Lehmann. 2007. "Differential Treatment and Communicative Interactions: Why the Character of Social Interaction is Important." *Law & Policy* 29(2): 257-83.
- Nowlan, Linda. 2005. *Buried Treasure: Groundwater Permitting and Pricing in Canada*. Toronto: Walter and Duncan Gordon Foundation.
- O'Connor, D. R. 2002. Report of the Walkerton Inquiry. Toronto: Queen's Printer for Ontario.
- Ontario Building Code Act, 1992 S.O. c. 23.
- Ontario Professional Engineers Act, 1990 R.R.O. Reg. 941.
- Ontario. Municipal Affairs and Housing. 2007. "Court Decision on PEO Application." http://www.obc.mah.gov.on.ca/Page1400.aspx (15 March 2010).
- Ontario. Ministry of Municipal Affairs and Housing. 2009. 2006 Building Code Compendium. Volumes 1 & 2. Toronto: Queen's Printer for Ontario.
- Ontario. Ministry of Municipal Affairs and Housing. 2009. "Ask A Building Code Question." http://www.obc.mah.gov.on.ca/Page37.aspx (01 September 2009).
- Ontario Society of Professional Engineers. n.d. "Building Code Reform Bill 124." Issues. http://www.ospe.on.ca/gr_issues_brrag.html (12 August 2009).
- Osborne, David and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. Reading, Mass.: Addison-Wesley Publishing Company.

- Parsons, Wayne. 1995. *Public Policy. An Introduction to the Theory and Practice of Policy Analysis*. London: Edward Elgar.
- Peterson, Steven A. and Amy M. Brofcak. 1997. "Street-Level Bureaucrats and AIDS Policy: The Case of the School Psychologist." *Professional Psychology: Research and Practice* 28(1): 81-85.
- Pressman, Jeffrey L. and Aaron Wildavsky. 1973. Implementation: how great expectations in Washington are dashed in Oakland; or, Why it's amazing that Federal programs work at all, this being a saga of the Economic Development Administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes. Berkeley: University of California Press.
- Proudfoot, Jesse and Eugene J. McCann. 2008. "At Street Level: Bureaucratic Practice In The Management Of Urban Neighborhood Change." *Urban Geography* 29(4): 348-70.
- Pulzl, Helga and Oliver Treib. 2007. "Implementing Public Policy." In *Handbook of Public Policy Analysis*. Fischer, F., Miller, Gerald., Sidney, Mara (eds.), pp. 89-107.
- Riccucci, Norma M. 2002. "Implementing Welfare reform in Michigan: The Role Of Street-Level Bureaucrats." *International Journal of Public Administration* 25(7): 901-21.
- Sabatier, Paul and Mazmanian, Daniel. 1979. "The Conditions of Effective Implementation." *Policy Analysis* 5: 481-504.
- Sabatier, Paul and Mazmanian, Daniel. 1980. "A Framework of Analysis." *Policy Studies Journal* 8:538-560.
- Short, Donald E. 2004. "The New Ontario *Building Code Act:* The Long And Don Short Of It...Redux." http://www.fasken.com/files/Publication/07616cdb-fe11-4209-b84f-234e44b9b281/Presentation/PublicationAttachment/5c40b572-6479-4e92-9cbc-9a06dc8023cb/NEW BUILDING CODE ACT.PDF (12 August 2009).
- Smith, Nancy. 2001 (Spring). The Impact of BRRAG on the Ontario Association of Architects." *Ontario Building Officials Association Journal* Online. http://www.oaa.on.ca/client/oaa/OAAHome.nsf/ArchNewsByDate/9CA558A83AD7805 7 (09 September 2009).
- Taylor, Ian. 2007. "Discretion and Control in Education: The Teacher as Street-level Bureaucrat." *Educational Management Administration & Leadership* 35(4): 555-72.
- Thomas, John Clayton. 1986. "The Personal Side of Street-Level Bureaucracy Discrimination of Neutral Competence?" *Urban Affairs Quarterly* 22(1): 84-100.
- United States. Environmental Protection Agency. 2009. "Drinking Water Contaminants." http://www.epa.gov/safewater/contaminants/index.html (13 April 2010).

- Upper Thames River Conservation Authority. 1989. "The Clean Up Rural Beaches (CURB) Study." http://www.thamesriver.org/Planning_&_Research/water_quality.htm (25 February 2010).
- Weissert, Carol S. 1994. "Beyond the Organization: The Influence of Community and Personal Values on Street-Level Bureaucrats' Responsiveness." *Journal of Public Administration Research and Theory* 4(2): 225-54.
- Zwick, David and Marcy Benstock. 1971. Water Wasteland. New York: Grossman Publishers Inc.