STRUGGLES OVER URBAN SUSTAINABILITY IN SASKATOON & EDMONTON:
THE USE OF POLICY NARRATIVES BY ADVOCACY COALITIONS

A Thesis Submitted to the College of
Graduate and Postdoctoral Studies
In Partial Fulfillment of the Requirements
For the Degree of Doctor of Philosophy
In the Johnson-Shoyama Graduate School of Public Policy
University of Saskatchewan
Saskatoon

By

Cody Sharpe

© Copyright Cody Sharpe, April 2018. All rights reserved.
PERMISSION TO USE

In presenting this thesis/dissertation in partial fulfillment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University may make it freely available for inspection. I further agree that permission for copying of this thesis/dissertation in any manner, in whole or in part, for scholarly purposes may be granted by the professor or professors who supervised my thesis/dissertation work or, in their absence, by the Head of the Department or the Dean of the College in which my thesis work was done. It is understood that any copying or publication or use of this thesis/dissertation or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of Saskatchewan in any scholarly use which may be made of any material in my thesis/dissertation.

DISCLAIMER

Reference in this thesis/dissertation to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by the University of Saskatchewan. The views and opinions of the author expressed herein do not state or reflect those of the University of Saskatchewan, and shall not be used for advertising or product endorsement purposes.

Requests for permission to copy or to make other uses of materials in this thesis/dissertation in whole or part should be addressed to:

Head of the Johnson-Shoyama Graduate School of Public Policy
Diefenbaker Building, 101 Diefenbaker Place
University of Saskatchewan
Saskatoon, Saskatchewan S7N 5B8
Canada

OR

Dean
College of Graduate and Postdoctoral Studies
University of Saskatchewan
116 Thorvaldson Building, 110 Science Place
Saskatoon, Saskatchewan S7N 5C9
Canada
Abstract

The Advocacy Coalition Framework (ACF) is one of the most well-established and widely-applied theories of the policy process. However, it is rarely applied to policy making at the municipal level. Here, a first step towards filling this research gap is made by applying the ACF to two Canadian cities, Saskatoon and Edmonton, and by looking for the role of stories in cementing sustainability coalitions together. Examining municipal sustainability coalitions provides an opportunity to address a second gap in the literature. The positive role this order of government can play in improving environmental sustainability is increasingly recognized, but the ‘what’ and ‘how’ of sustainability are as contested as ever. By codifying two poles on the spectrum of sustainability definitions and looking for these polar opposites in the beliefs and actions of policy makers, this study uncovers significant difference between academic and practitioner understandings of sustainability. The study finds evidence for the existence of nascent rather than mature coalitions in both cities. Nascent coalitions are groups whose members share common beliefs about sustainability, but only engage in soft coordination in pursuit of their policy objectives. In addition, the range of actors consistently involved in policy making is notably limited and the absence of mature coalitions in each city may be attributed both to the lack of umbrella organizations working to develop shared problem frames and to an aversion among municipal actors for conflict over policy options. In the absence of strong coordination by coalitions, stories play a critical role in municipal policy debates, specifically by identifying the victims, villains, and heroes of various policy options, thus biasing action or inaction as the ‘correct’ policy choice. Finally, we find that firm academic definitions of sustainability are not reflected in how policy actors in either city understand sustainability. Instead, individual policy makers express beliefs from each pole on the spectrum, possibly because of the necessity of pragmatism in municipal policy making.
ACKNOWLEDGEMENTS

Thank you to my supervisor, Dr. Jeremy Rayner, for his support and guidance during the creation of this thesis. Thanks too to my committee members for their assistance with revising and expanding my work: Dr. Joe Garcea; Dr. Bob Hawkins; Dr. Elizabeth Schwartz; Dr. Ken Coates; and Dr. Patrick Smith. Thank you to the Ministry of Education, Nexen Inc., University of Saskatchewan, and the Johnson-Shoyama Graduate School of Public Policy for financial assistance during my studies.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMISSION TO USE</td>
<td>I</td>
</tr>
<tr>
<td>DISCLAIMER</td>
<td>I</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>II</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>III</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>IV</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. THE ADVOCACY COALITION FRAMEWORK</td>
<td>2</td>
</tr>
<tr>
<td>2.1 BELIEFS</td>
<td>3</td>
</tr>
<tr>
<td>2.2 COORDINATION</td>
<td>4</td>
</tr>
<tr>
<td>2.3 LESSONS FROM OTHERS</td>
<td>6</td>
</tr>
<tr>
<td>3. NARRATIVES AS A COALITION RESOURCE IN THE ACF</td>
<td>9</td>
</tr>
<tr>
<td>3.1 THE ROLE OF STORIES</td>
<td>10</td>
</tr>
<tr>
<td>3.2 THE COMPONENTS OF STORIES</td>
<td>11</td>
</tr>
<tr>
<td>4. METHOD</td>
<td>13</td>
</tr>
<tr>
<td>4.1 CASE STUDIES</td>
<td>15</td>
</tr>
<tr>
<td>4.2 CODE DEVELOPMENT</td>
<td>17</td>
</tr>
<tr>
<td>5. CODING SUSTAINABILITY</td>
<td>19</td>
</tr>
<tr>
<td>5.1 SUBSTITUTABILITY &amp; NON-SUBSTITUTABILITY</td>
<td>22</td>
</tr>
<tr>
<td>5.2 TECHNOLOGICAL &amp; BEHAVIORAL SOLUTIONS</td>
<td>23</td>
</tr>
<tr>
<td>5.3 TEMPORARY &amp; ABSOLUTE LIMITS TO GROWTH</td>
<td>24</td>
</tr>
<tr>
<td>5.4 ANTHROPOCENTRIC &amp; ECOCENTRIC VALUATIONS OF NATURE</td>
<td>26</td>
</tr>
</tbody>
</table>
6. A CASE STUDY OF SASKATOON.................................................................................................................. 27
  6.1 SASKATOON’S JOURNEY TO CURBSIDE RECYCLING........................................................................ 27
  6.2 AN ACF DISCUSSION OF THE CURBSIDE RECYCLING DEBATE IN SASKATOON.......................... 33
  6.3 PUBLIC TRANSIT & PUBLIC SUBSIDES IN SASKATOON.................................................................... 42
  6.4 AN ACF DISCUSSION OF EVENTS INVOLVING PUBLIC TRANSIT IN SASKATOON...................... 47

7. INFORMANT INTERVIEWS IN SASKATOON.............................................................................................. 53
  7.1 THE MEANINGS OF SUSTAINABILITY IN SASKATOON.................................................................. 54
      7.1.1 Ecocentric vs. Anthropocentric Valuations of Nature................................................................. 55
      7.1.2 Absolute vs. Temporary Limits to Growth.................................................................................... 58
      7.1.3 Non-Substitutability vs. Substitutability of Resources................................................................. 61
      7.1.4 Behavioral vs. Technological Solutions....................................................................................... 63
  7.2 THE CREATION OF POLICY IN SASKATOON............................................................................... 66
      7.2.1 Coordination in Saskatoon......................................................................................................... 69
      7.2.3 Resources in Saskatoon............................................................................................................. 71
  7.3 SUSTAINABILITY NARRATIVES IN SASKATOON............................................................................... 74
      7.3.1 Pro-Sustainability Heroes, Victims, and Villains in Saskatoon............................................... 74
      7.3.2 Pro-Sustainability Scenarios & Arguments in Saskatoon......................................................... 77
      7.3.3 Anti-Sustainability Heroes, Victims, and Villains in Saskatoon........................................... 79
      7.3.4 Anti-Sustainability Scenarios & Arguments in Saskatoon......................................................... 80

8. A CASE STUDY OF EDMONTON............................................................................................................... 81
  8.1 REVENUE GENERATION AND INCENTIVIZING WASTE REDUCTION IN EDMONTON..................... 82
  8.2 AN ACF DISCUSSION OF EDMONTON’S APPROACH TO SOLID WASTE MANAGEMENT............... 86
  8.3 FINDING FUNDING FOR LRT AND BRT EXPANSION IN EDMONTON........................................ 90
  8.4 AN ACF DISCUSSION OF PUBLIC TRANSIT FUNDING DEBATES IN EDMONTON....................... 93

9. INFORMANT INTERVIEWS IN EDMONTON......................................................................................... 99
  9.1 THE MEANINGS OF SUSTAINABILITY IN EDMONTON................................................................... 100
9.1.1 Ecocentric vs. Anthropocentric Valuations of Nature ................................................................. 100
9.1.2 Absolute vs. Temporary Limits to Growth .................................................................................... 102
9.1.3 Non-Substitutability vs. Substitutability of Resources ................................................................. 104
9.1.4 Behavioral vs. Technological Solutions ......................................................................................... 104
9.2 THE CREATION OF POLICY IN EDMONTON .............................................................................. 106
  9.2.1 Coordination in Edmonton ........................................................................................................... 106
  9.2.2 Resources in Edmonton ............................................................................................................ 108
9.3 SUSTAINABILITY NARRATIVES IN EDMONTON ....................................................................... 110
   9.3.1 Pro-Sustainability Heroes, Victims, and Villains in Edmonton ............................................. 110
   9.3.2 Pro-Sustainability Scenarios and Arguments in Edmonton .................................................. 112
   9.3.3 Anti-Sustainability Heroes, Victims, and Villains in Edmonton ............................................ 115
   9.3.4 Anti-Sustainability Scenarios and Arguments in Edmonton .................................................. 116
10. DISCUSSION ...................................................................................................................................... 116
  10.2 ALTERNATIVE EXPLANATIONS ................................................................................................. 124
11. CONCLUSION ..................................................................................................................................... 129
12. BIBLIOGRAPHY ................................................................................................................................. 133
APPENDIX 1 ............................................................................................................................................. 151
1. Introduction

Canada is an increasingly urban country, and our largest cities control operating budgets in the billions. Responsibilities vary, with some delivering services because of legislative obligation, while the programs delivered by others are intended to meet the unique expectations of locals. The limit of a city’s responsibilities is set by an ongoing debate, one often concerned with maintaining the municipality’s fiscal health while also providing a steadily increasing quality of life for residents. Increasingly, the pursuit of environmental sustainability has become a topic in these debates. But what exactly is environmental sustainability, in an operational sense? How do policy actors come up with a working definition which can be used to justify or oppose policies and programs? How do actors network and cooperate with each other to achieve change, and what tools do they rely on?

The purpose of this study is to answer three questions, listed below. Through thick description of events, semi-structured personal interviews, and the application of an accepted theory of the policy process, we will develop a more sophisticated understanding of how policy is made in two examples of this increasingly important order of government:

1. To what extent do sustainability-focused advocacy coalitions operate within municipal political settings?
2. How do sustainability-focused advocacy coalitions compete in municipal policy processes to enshrine their preferences regarding strong and weak sustainability in policy outputs?
3. How can narratives, as a coalition resource, help explain the success or failure of advocacy coalitions in achieving their preferred policy outputs?
2. The Advocacy Coalition Framework

In the late 1980s and early 1990s, Paul Sabatier formalized his dissatisfaction with the stages approach to describing public policy processes, provoked “in large part because it is not a causal theory” (Sabatier, 1991: p. 147). In doing so, he produced a framework which has become a mainstream approach to studying public policy. He began by illustrating the “key elements which anyone familiar with policy-making in the U.S. will instantly recognize” (Sabatier, 1988: p. 130):

- The importance of how problems are perceived by policy actors.
- The typically gradual, but occasionally sudden and unpredictable, shifts in public and elite opinion regarding the urgency of a specific problem.
- The incomplete fulfillment of formal policy goals.
- The iterative process of policy development, where issue resolution is often only temporary and incremental.

In Sabatier’s view, the stages approach to public policy did not deal directly with these key elements, prompting him to construct his own theoretical understanding on several methodological assumptions. First, that understanding policy change and stability require the scholar gather observations over the course of a decade, at minimum. Doing so would contextualize shifts in opinion and problem framing, and position the analyst to expose the mechanisms which moved each. Second, that the core analytical unit was the policy subsystem, a network of actors, organizations, and institutions actively focused on a policy problem over a particular period of time and within clear geographical boundaries. Practically, this assumption provides guidance to the analyst on where to look when gathering observations of policy processes, as well as a decision rule on whether formal study of an issue is warranted; no policy subsystem, no phenomenon to investigate. Third, Sabatier assumed that policies and programs could be conceptualized as belief systems made real, “as sets of value priorities
and casual assumptions about how to realize them” (my emphasis) (Sabatier, 1988: p. 131). These value priorities and casual assumptions were championed by advocacy coalitions, collections of “researchers, specialist reporters…professional associations…[and] policy specialists” across governmental departments who share beliefs and work cooperatively to embed them in policy (Sabatier, 1991: p. 148).

2.1 Beliefs

Sabatier’s advocacy coalitions are comprised of individuals and organizations, and are thus properly thought of as networks or communities. Over time, members contribute to the development and prioritization of the larger coalition’s hierarchy of beliefs, divided into deep core, policy core, and secondary beliefs. These three levels differ on three dichotomous continuums: abstract vs. applied; unexamined vs. explicit; and non-negotiable vs. flexible. The first dichotomy speaks to what the belief is concerned with, namely virtues or goods. Deep core beliefs are answers to questions about humanity’s place in the natural environment, the proper role of government in public and private life, the legitimacy of coercive force, and similar concerns. Policy core beliefs are the result of combining deep core beliefs with extensive knowledge of a policy issue. For example, two individuals with the same educational understanding of climate change, but different ideas of the relative value of non-human species, would hold different policy core beliefs. Secondary beliefs are akin to instrument settings, and are concerned with the operationalization of policy core preferences.

The second dichotomy, unexamined vs. explicit, highlights the relative analytical opacity of each level of belief. Deep core perspectives are rarely discussed in public political settings, and are thus difficult to spot via content analysis. Policy core beliefs are easier to observe in public debate over policy options, given that they are a combination of deep core belief and considerable issue knowledge, and are concerned with achieving a specified inventory of policy outputs and outcomes. Secondary
beliefs are easier still, since they are concerned with the specific settings of the policy instruments relied upon to generate outcomes. These are methodologically meaningful distinctions. An analyst interested in the deep core beliefs of a coalition and its constituent members would need to develop different lines of evidence than one interested only in policy core beliefs. This explains why the present project collected informant interviews as well as documents for analysis.

Finally, the non-negotiable vs. negotiable distinction gives the analyst who is interested in reducing conflict in a policy subsystem some guidance on potentially helpful actions. Deep core beliefs are non-negotiable, partly because they are unexamined in public debate and partly because they are foundational to the advocacy coalition’s broader policy platform. Shifts in deep core beliefs necessitate shifts in related policy core and secondary beliefs, a challenging domino effect for any political actor to willingly trigger. Policy core and secondary beliefs are more flexible, with both negotiation and learning across coalitions more plausible. The ACF assumes that learning is more likely in situations of moderate policy conflict, where the competing coalitions must deal with one another within a professionalized policy forum, and where the issue being debated is both readily quantifiable and where accepted quantitative date exists (Sabatier & Weible, 2007). The role for the analyst interested in reducing conflict and improving the possibility of issue closure lies in fostering these preconditions of learning, and in ensuring conflict focuses on policy core or secondary beliefs, not deep core preferences and values.

2.2 Coordination

The second key identifying characteristic of advocacy coalitions is the coordination between its constituent members. Initially, Sabatier advanced a strict operationalization of coordination, arguing that valid examples of coordination needed to be meaningful rather than trivial, must involve sharing resources or jointly developing strategies to achieve change, and must be routine rather than
intermittent. (Sabatier & Jenkins-Smith, 1996). The ACF has changed over time, and now a less strict operationalization of coordination is also on offer. While the above description captures hard coordination, soft coordination exists wherever the analyst can spot instances of shared language and problem definitions across policy actors (Zafonte & Sabatier, 1998: p. 480). This amendment was introduced partly in response to criticism that the ACF assumed shared beliefs would automatically lead to coordination, with no intervening factors (Schlager, 1995; Schlager & Blonquist, 1996). However, it is also a methodological concession made after years of studies which, by design, could only observe beliefs and not coordination, and were thus applying an incomplete version of the ACF; such truncated applications of the framework continue today (Kubler, 2001; Leifeld, 2013; Liftin, 2000; Mintrom & Vergari, 1996). In this study we use the term “nascent coalition” to describe the outcomes of soft coordination between actors who share some beliefs but not necessarily a completely consistent set of beliefs. Over time, these nascent coalitions may dissolve or become mature advocacy coalitions of the kind recognized by Sabatier, featuring hard coordination as well as a completely consistent set of shared beliefs.

The distinction between hard and soft coordination is a critical conceptual divide in this study. Across the documents reviewed and the interviews conducted, hard coordination is notably rare. Policy advocates, even those with a long history of active participation in the policy space, often took no steps towards formal coordination with other, similar-minded advocates. Why this is the case is beyond the intentions of this study, but it is a fact of advocate behaviour in both cities. Soft coordination is considerably more common, with repeated instances of actors using shared language across time and issues. This behaviour often coincided with a shift in policy outcomes, suggesting its role in structuring problem definitions is an aid in achieving issue closure. Soft coordination may also be an example of policy learning, a process of internal feedback whereby an actor’s understanding of problem characteristics, institutional constraints, and external, system-level events lead them to modify their
behaviour in order to shift policy outcomes (Sabatier, 1988: p. 133). Without acknowledging and applying this more granular understanding of coordination, important and productive actor behaviour would be missed.

The relationship between coordination and coalitional beliefs is reciprocal and reinforcing; coordination presents an opportunity and incentive for shared beliefs to develop, while shared beliefs identify who you ought to coordinate with (without making coordination inevitable). Nascent coalitions will be weak on coordination and shared beliefs, and thus feature a more fluid membership list, while mature coalitions will be strong to the point of rigidity (Sabatier, 1988: p. 140). At the same time, coordination encourages the professionalization of advocacy coalitions in a way that shared beliefs alone do not. The basic concerns of coordination include achieving agreement on what policy output or outcome ought to be pursued, the strategy, tactics, and division of labour to be followed while doing so, and the monitoring of individual coalition members’ compliance with these decisions (Sabatier, 1998: p. 116). Settling these points require at least some collation members to invest in developing the resources necessary to convene and organize other organizations, entities with goals, interests, and responsibilities which may put them in tension with the broader coalition’s objectives. The unintended consequences of coordination for coalitional strength ought to be stressed, especially given the tendency of ACF-based studies to neglect the role coordination plays in establishing and maintaining coalitional boundaries.

2.3 Lessons from Others

Here we will briefly discuss the range of issues and research questions which have been investigated using the ACF, identify challenges that have emerged in the course of the framework’s application, and explain how those most relevant to his study will be dealt with.
Sabatier’s theoretical offering has been applied by many scholars working in policy studies (Davis & Davis, 1988; Elliott & Schlaepfer, 2001; Albright, 2011). Substantively, many of these applications have been focused on environmental issues (Jordan & Greenaway, 1998; Liftin, 2000; Meijerink, 2005; Ingold, 2011), though the ACF has also been applied to research questions concerned with international relations (Hirschi & Widmer, 2010), public health (Breton et. al., 2006), pension reform (Leifeld, 2013), public education reform (Mintrom & Vergari, 1998), and drug policy (Kubler, 2001). This substantive diversity is routinely unified by incomplete application of the ACF, however. Many authors who explicitly placed themselves in the ACF camp neglected to capture instances of coordination between coalition members, and focused exclusively on identifying shared beliefs (Brecher et. al, 2009; Breton et. al., 2006; Davis & Davis 1988; Elliott & Schlaepfer, 2001; Heintz, 1988; Ingold, 2011; Jordan & Greenaway, 1998; Kubler, 2001; Leifeld, 2013; Lifin, 2000; Nohrstedt, 2005). While Sabatier’s original conceptualization of coordination was strict, subsequent revisions to the framework drew a useful distinction between hard and soft instances of coordination, the latter of which are more readily observable to the analyst who has not been conducting surveys on a policy subsystem for ten years or more (Zafonte and Sabatier, 1998). This application gap is problematic because it calls into question the theoretical insights developed in the course of study; if the framework is not fully applied, how can research findings be relied on to refine or reject the framework? In this study, the distinction between hard and soft coordination will be drawn upon to ensure the application gap is not replicated, to demonstrate the practicality of operationalizing a distinction between hard and soft coordination, and to ensure that the study can draw a distinction between finding a mature or a nascent coalition.

While the range of issues investigated in ACF terms is broad, the variety of orders of government examined is not. The dominant focus has been on federal or state governments and their agencies – unsurprising, considering the framework’s origins in the study of environmental policy in
the United States. However, the role of municipal governments in developing policy in a broad range of fields is increasing around the world, with Canada being no exception. Governance arrangements in Canadian cities are increasingly complicated, with multi-tier, regional, and special-purpose bodies increasingly common, and delivering services ranging from waste collection and processing to emergency housing support. As their direct and assumed responsibilities increase, so too should the amount of attention given to how policy is made in these settings by policy scholars. Given the ACF has not previously been applied to the municipal order of government, this study presents an excellent opportunity to learn how well its assumptions travel, and potentially generate recommendations for amendment.

A third criticism involves the ACF’s aggregation of individuals and organizations into larger collectives. Sabatier argued that coalitional beliefs – those which could be attributed to the advocacy coalition as a whole and were reproduced by its members through the policy remedies they sought – were clarified gradually, as “allies create all sorts of pressures for common positions…[and that] there will be greater fragmentation of beliefs in recently-formed subsystems than in more established ones” (Sabatier, 1988: p. 140). What he did not explain was how this pressure played out at the level of the coalition member, how individuals and organizations who actively attempted to participate in a coalition (through hard coordination) reprioritized and changed their beliefs in order to earn membership. Constituents are still constituents, even in the larger body. What is the possibility for intra-coalitional conflict, where the shifts demanded by the coalition became too much for an individual member to accommodate? What would this do to the range of resources available to the coalition, or to the membership network? Fenger & Klok discussed the possibility of “competitive interdependency,” where “the action of one actor interferes with another actor’s ability to take action or achieve his goals” (2001: p. 162), while Davis & Davis noted incidents of individual coalition members collaborating across coalitional boundaries (1988), and Zafonte & Sabatier discussed examples of
membership fluidity in various policy subsystems (2004). Coalition members retain their own identity, resource constraints, and performance expectations; under what conditions do these factors override their sense of obligation to the coalition? This is a potential avenue of policy change unexplored by the ACF, primarily because the conceptual focus is on the coalition rather than the constituent members. In this study, we will watch for shifting membership as a precondition of policy change.

3. Narratives as a Coalition Resource in the ACF

The ACF identifies many resources which may be of use to policy advocates and coalitions. Money, control over decision-making venues, elite champions, and mobilizable troops, just to name a few (Sabatier & Jenkins-Smith, 1993). In this study, we argue that narratives are a coalition resource and an aid to policy change. Within the discipline of policy studies, a systematic approach to describing and evaluating narratives has developed gradually over the past two decades. This approach to understanding a given policy space has often been applied to high-conflict issues, situations where there is low agreement on which facts are relevant, tension over who has a legitimate role in decision making, and largely negotiable preferences in terms of policy outcomes. While much of literature has focused on building an alternative theory of policy making, this study will isolate the concept of narrative and examine its usefulness to building ACF-based understandings of policy processes. In this section, we will briefly cover why stories matter to the study of policy conflicts – in terms of the clarity they offer in understanding policy change and stability – and break the concept of narrative down into analytically manageable pieces which can be applied within an ACF-based study of policy making.
3.1 The Role of Stories

Debates around policy issues are often complicated – in that a great deal of information is required before a resolution can be achieved – and sometimes complex, in that it is not always clear what information is relevant, what is the casual relationship between the phenomena in question, and what goods or values a legitimate resolution must provide. Stories are paths to issue simplification and manageability, tools which can be relied on to aid in achieving, or preventing, policy action. Stories do this by explaining why there is a conflict in the first place and outline the boundaries between competing narratives, and consequently the collections of actors promoting each narrative. Furthermore, policy stories suggest potential actions which may be taken to achieve issue closure, thus providing an agenda for decision makers to follow and a clear policy ask for their constituents to make and evaluate them against (Hajer, 1995; Roe, 1994).

These are not theoretical assertions made without investigation. There is a demonstrated relationship between issue framing and individual perception of the issue, where stories that organize events in clear chronological order and imply causal relationships increase understanding and support for a specific fix (Berinsky & Kinder, 2006; Bridgeman & Barry, 2002). There is also an observed relationship between the frequency of exposure to a frame and the influence that frame has over decision making; in short, familiar stories have a greater influence than unfamiliar or new stories (Chong & Druckman, 2007). The power of narrative accretion has also been explored, where the outcomes of past stories are drawn on to provide the prologue for new narratives and thereby influence both public discourse and elite solution-seeking behaviour (McBeth et. al. 2007; Shanahan & McComas, 1999). Policy stories matter both at the time of their telling, and beyond.

Policy stories can serve to encourage change and, as suggested above, maintain stability, even in the face of experiences and evidence which suggest the story is no longer a valid guide to understanding and action. Hampton referred to stories as “sticky,” and pointed to their role in providing
legitimacy to a suite of subsequent ideas, positions, and solutions (2004). Stories serve as the foundation stones of institutions, and replacing one with another implies a requirement for significant changes to, or replacement of, a myriad array of other activities and arrangements. At the same time, in issue spaces characterized by a high degree of conflict and low possibility of resolution, the deliberate development of a new narrative offers the opportunity for actors to shift their understanding of the core problem and achieve a solution (Hajer 1995; Roe 1994).

3.2 The Components of Stories

The conceptual development of narratives as observable, socially-constructed phenomenon has been a shared undertaking of numerous authors across many disciplines. Some have attempted to explain why one story is preferred by individuals or embedded in institutions over others by identifying key criteria against which all narratives are evaluated. For example, Bernisky and Kinder examined the role played by coverage (the amount of available evidence incorporated into the story), coherence (the consistency, plausibility, and completeness), and uniqueness (the number of plausible and competing stories) in privileging one story over another, and found that manipulating each quality affected how individuals remembered political events (2006). Cho et al. were interested in how narrative structure affected the persuasive potential of stories, and carried out experiments which varied the plausibility, typicality, factuality, narrative consistency, and perceptual quality of stories to tease out the power of each in shaping opinion (2014). Nearly thirty years ago, Goldring et. al. found that a story which would induce its audience to act required “inter alia, extensive multimedia efforts with clear, concise, credible, and repeated messages,” [emphasis his] but that even stories which featured all these qualities would still see their affective impacts mediated by factors internal to the individual hearing the narrative (1992, p. 29). Chong and Drukman made a similar point regarding the difference between storyteller’s considerations and story recipient’s response with their distinction between frames in communication,
or the “words, phases, and presentation styles” of a speaker, and frames in thought, “what an audience member believes to be the most salient aspect of an issue” (2007, p. 100-101). Even with a detailed inventory of what makes a story more persuasive and complete than a competitor – a tool which sharpens the agency of a policy actor by providing some guidance to acting effectively – they are still working in an operational space over which they have limited real control.

Other authors have focused on theorizing narratives at a more abstract level, the aim being to equip the analyst for observation of the phenomenon. Bridgeman and Barry discuss the avoidant narrative, stories which discuss situations or conditions too unacceptable to ignore, and the pursuant narrative, stories which discuss the opposite. Their third category is the pre-metanarrative, a story which exists latently within a controversy – in that it is unrecognized by controversy participants – but still works to set institutional boundaries on political conflict; an analyst who defines this pre-metanarrative may aid in moving a policy stalemate towards closure, and is a concept which provides a positive, action-oriented role for the analyst to play (2002).

This metanarrative category is also discussed by Roe, though his variant requires a more active contribution from the analyst. Here, a metanarrative is generated by comparing the dominant narrative of a policy issue to the stories opposing it, the intention in doing so, as above, to generate a new narrative which allows for policy action and the management of tensions (1994). What distinguishes Roe’s metanarrative from Bridgeman and Barry’s is the degree of purposeful intent on the part of the analyst, with the former being decidedly more activist than the latter. This aligns Roe’s perspective on the applied value of the narrative turn in public policy with Hajer (1995) and, more recently, McBeth et al. (2005, 2007) and Shanahan et al. (1999, 2007). This collection of scholars is related in their conviction regarding the conceptual value of narratives and their applied value in resolving policy controversies, particularly conflicts over environmental issues. Hajer used narratives as a clarifying concept when attempting to understand the lines between competing collections of organizations
involved in the European acid rain controversy, also discussing the positive role they could play given the right institutional changes. McBeth et al. explained how stories set unexamined limits on the range of solutions which will be considered, and establish not only winners and losers but define who may self-identify as a winner or loser; in addition, they identified an inventory of possible narrative strategies which policy advocates could deploy, given their institutional position and existing position of narrative dominance or submission. Shanahan et al. contributed to this work by demonstrating the real effects stories have on policy preferences, while also sharpening the operationalizing of the components of narratives so that analysts can contribute to the development of better, more complete, policy stories.

4. Method

This section serves to briefly describe the case study and code book approaches to qualitative research, and to connect these methodological choices to the study’s research questions. The relationship between questions and methods are as follows:

1. To what extent do sustainability-focused advocacy coalitions operate within municipal political settings?

Answering this question requires adopting the ACF’s assumptions regarding the temporal and geographic boundaries which must be respected to spot coalition behaviour, assumptions which cleanly fit with the case study method. The ACF requires a minimum of ten years be covered in the study, and that the geography be bounded by an explicit organizational or governmental limit, in this case municipal. The study also needs to have a clear understanding of the issue boundaries, or the spaces in
which issue decisions and the ideas behind those decisions are contested. This study includes a definition of sustainability embedded in literature - and a series of codes based on this definition - but the issue boundaries are set by the cases themselves. In both cities, content on a wide variety of policy spaces was reviewed with an eye to spotting the problems which appeared to be discussed in the language of sustainability. For example, preliminary data gathering included reviews of newspaper clippings on municipal water security, wastewater treatment, energy production, land use planning, food security, and the like. This list of issues was winnowed down based on the number of actors participating in the policy space, the range of positions they occupied (legislator, journalist, activist, bureaucrat), and how often policy conversations included sustainability as an issue characteristic. In this way, the study understands the issue of sustainability as the cities do, rather than assuming the researcher’s understanding is interchangeable with the cities’. This study also develops clear boundaries between in- and out-of-case data, or stopping points on research.

2. How do sustainability-focused advocacy coalitions compete in municipal policy processes to enshrine their preferences regarding strong and weak sustainability in policy outputs?

Answering this question again requires taking a long-view of policy making in order to understand the nature of conflict in municipal policy making; are conflicts rare or routine, who engages in conflict, and how strong are the ties between competing actors? The ACF’s practice of observing a space for ten years or more is appropriate here, as is the case study method’s traditional reliance on content analysis and informant interviews. Reviewing documents is one of the few ways to study a policy event after it has occurred, and interviews ensure the study’s findings are not reliant on a single line of evidence. Developing two lines of evidence is also consistent with the best practices of case study research, as highlighted in a later section. Answering this question is also smoothed by the
development of a code book, a collection of formally-defined and explicitly-related terms which can simplify the analysis of large volumes of material.

3. How can narratives, as a coalition resource, help explain the success or failure of advocacy coalitions in achieving their preferred policy outputs?

Answering this question requires developing a code book, a tree of concepts where relationships between terms are clear, and higher-order concepts are made more granular by lower-order codes. These codes can be based on the core concepts of theories, such as the ACF’s three-tiered hierarchy of beliefs, or on the content of case study material itself. This latter approach is often referred to a ‘grounded’ one, but here codes are developed not to build new theory but to aid in the analysis of the thousands of pages of newspaper clippings and interview transcripts examined in the course of this study. The codes developed in order to answer this particular question are based on the core elements of narrative, as defined by the literature discussed above.

4.1 Case Studies

The case study approach is a commonly used method of inquiry in the social sciences, one often used to investigate how and why questions which “deal with operational links needing to be traced over time” [emphasis his] (Yin, 2009: p. 9). Yin’s short definition is echoed by scholars such as Gerring, who suggests that a case study “may be understood as the intensive study of a single case where the purpose of that study is - at least in part - to shed light on a larger class of cases (a population)” (2007: p. 20), and George and Bennett, who wrote case studies represent "the detailed examination of an
aspect of a historical episode to develop or test historical explanations that may be generalizable to other events” (2005: p. 5). Yin also provides a more formal definition of the method (2009: p. 18):

1. A case study is an empirical inquiry that:
   a. Investigates a contemporary phenomenon in-depth and within its real-life context, especially when;
   b. The boundaries between phenomenon and context are not clearly evident.
2. The case study inquiry:
   a. Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result
   b. Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
   c. Benefits from the prior development of theoretical propositions to guide data collection and analysis.

This two-part definition highlights what types of questions and events the case study approach is best suited to investigate, while simultaneously directing the researcher to making subsequent methodological choices in certain ways. For example, points 2.a and 2.b suggest the case study researcher will need to sift through a considerable amount of material while answering their questions, meaning that a formalized approach to reducing and clarifying what counts as data would be helpful. Point 2.b also identifies a best practice of case study research, that of cultivating multiple lines of evidence from different sources and perspectives. Accordingly, this component of Yin’s definition primes the researcher to develop collection and analysis protocols for different types of data, an act of informational translation which can be made challenging by the structural differences between types of evidence. For example, the common content and style of a newspaper article will be different from a government policy document, which will be different from an interview transcript. All three sources
have different authors, objectives, and styles of delivering a message, yet the researcher must design a means of comparing the contents of each in a systematic and valid manner.

In this study, the focus is on the gradual development of urban sustainability as an objective of policymakers in urban settings. Already, we can see a blurring of the lines between phenomenon and context. While sustainability may be an abstract concept, the pursuit of urban sustainability is necessarily tied to a geographical, political, and institutional context. It makes little sense to talk about urban sustainability without reference to a specific urban area, which means the researcher interested in urban sustainability is going to need not only knowledge of what the core concept means, but also the urban context in which it is developing.

Saskatoon and Edmonton were chosen as the main units of analysis within this larger case study for the following reasons:

- They are accessible, given the resources available to the researcher.
- They are both single-tier municipalities, meaning they don’t share service of governance responsibilities with another local government.
- They are both regionally significant and not the edge settlements of a larger urban area.
- Neither is a global city in the mould of Vancouver, Montreal or Toronto.

4.2 Code Development

In qualitative research, the investigator is often faced with the task of systematically sifting through a large collection of data to arrive at an understanding of that data which can be shared with others. The key word here is ‘systematically’; while the understanding arrived at by the researcher is unavoidably contingent – that is, a different researcher working from a different theory may arrive at a different understanding of the same collection of data – this does not mean that it is based on the whim or bias of the researcher.
The purpose of incorporating explicit structure into the acts of data collection and analysis is twofold. First, to provide an audit trail for those who need to evaluate the quality of the researcher’s work and the plausibility of their understanding of the data. Second, to professionalize the researcher’s own habits, and demystify the practice of research into a replicable and incrementally improvable one.

One method of systematizing the practice of qualitative research involves the development of codebooks. These are indexes of theoretical concepts, defined according to a template, which can be observed within qualitative data such as interviews, historical documents, and some types of surveys. The concepts indexed in a codebook may be derived from existing theories, or they may be based on theoretical constructs observed within a collection of data itself. A codebook is a valuable methodological tool because it equips the qualitative research to reduce the amount of data they have in a systematized and consistent manner, a critical concern in projects which involve close reading of thousands of pages of written and transcribed material. Furthermore, the codebook is also of lasting value; once developed, it can be applied to the analysis and interpretation of other collections of data, or employed in the development of hypotheses for testing in other cases (Schreier, 2012). In short, it is a tool which is helpful not only to the completion of research projects, but the development of research agendas.

The codebook also arranges codes in a deliberate fashion, with higher-level being home to a series of lower-level, nested codes which break the larger concept into its component characteristics. The purpose behind defining a hierarchy of codes is to allow for degrees of a concept to be captured within a collection of qualitative material, allowing for more nuanced analysis and the generation of understanding which is closer to the data (Schreier, 2012). In this case, the higher/lower relationships can be seen between codes like Strong Sustainability, a higher-level code, and Technological Behaviour, a lower-level code. Any passage coded as Technological Behaviour is also an example of Strong Sustainability, but Strong Sustainability is more than just Technological Behaviour.
Because these codes are based on existing theoretical work rather than developed from the data itself, this project is inadvertently engineered to test the applicability of these theoretical constructs to the practice of local policy making. In addition, drawing from established work improves the construct validity of the codes applied in this project. The reliability of their use, however, rests on their repeated application to the same collection of data by the researcher, the intent being to ensure consistency in application across time.

5. Coding Sustainability

The purpose of this section is twofold. First, to provide a brief overview of the conceptual development of sustainability. Second, to operationalize the concept by defining two opposing visions of sustainability, each of which will be comprised of four key components. These components make up the codes which have been applied to the interviews conducted in Saskatoon and Edmonton, and will aid in developing the sustainability narratives attributed to each city. The importance of code development has been discussed earlier, as well as its validity as a methodological foundation on which to build an ACF-based understanding of a given policy subsystem. The special contribution of this section is its attempt to convert an ongoing academic and political debate into a set of reliably observable concepts, a tool which could be applied to other studies and as an aid to actors working in policy subsystems.

The most oft-cited attempt to institutionalize the idea of sustainability is the Brundtland Commission’s *Our Common Future* of 1987. This UN forum was convened to develop an approach to environmental protection which allows for economic development, and defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: p. 41). This definition can safely be labeled a mainstream one, appearing as it does in the sustainability plans of governments, corporations, and
universities (Roseland, 2012; Yates, 2012). For our purposes, Brundtland is important not because it settled a debate over defining what Hajer called the ecological crisis (1995, p. 8), but because it stands firmly at one pole of an ongoing debate.

Bosselmann (2008, p. 25-26) argues that Brundtland occupies one conceptual pole, while the other is marked by the Club of Rome’s Limits to Growth report of 1978. Both were the outputs of institutionalized actors attempting to come to grips with Hajer’s ecological crisis, a crisis characterized by rising rates of consumption and waste production, increasingly severe environmental consequences and growing concern over the capacity of natural sinks to process waste while remaining ecological productive (1995). In Bosselmann’s terms, the conflict between the Our Common Future camp and Limits to Growth camp mark the transition from the older ‘growth debate’ to today’s ‘sustainability debate,’ where the distinguishing factor is the scale of systemic challenge; growth debates were concerned with the viability of social, economic, and cultural practices at a local level, while sustainability debates have emerged as the spread of globalization has made larger threats like climate change possible. Each type of debate is sparked only in the event of an ecological crisis, but the latter is unique in that it also requires a certain set of institutional arrangements before it can occur. Without forums like the UN, there would be no official space in which to argue about the consequences of the political and ecological consequences of economic globalization, and thus no problem for policy to address (Echenique et al., 2012: p. 122).

The critical divide in the sustainability debate is over “whether the world we relate to is one fundamentally defined by scarcity (and thus limits) or by abundance (and thus unlimited potential)” (Yates, 2012: p. 22-23). Furthermore, differences persist over whether scarcity is absolute or relative, and over the relationship between humans and non-human species. Returning to Bosselmann, this divide was “symbolically visible in the fortress-type venue of the official Earth Summit, where states negotiated, and the beachside venue of the Global Forum, where civil society groups met, [and] the
sustainability agendas differed considerably” (2008, p. 34-35). Here we have a clear and meaningful conceptual conflict, one where actors have arrayed themselves into competing camps, and one which has real consequences for the range of policy measures which will be discussed as plausible alternatives and ultimately implemented. In finer terms, these competing sustainability agendas differ on four key points (Ross, 2006):

- The emphasis placed on economic, social, and environmental interests and needs;
- The tensions between humans needs now and in the future;
- The specific nature of those needs, and;
- Technology’s role in meeting humans needs, both today and in the future

Ross claims that “weaker interpretations of sustainable development…are based on the premise that technology and international trade will ensure there are always enough resources to meet [human needs],” (2006, p. 34-35), a perspective shared by Bosselmann, who suggests the stronger interpretation of sustainability is “critical of growth and favours ecological sustainability” (2008, p. 27). While some authors actively dismiss the conceptual divide identified by Ross, Bosselmann, and many others, arguing that sustainability outcomes and the steps necessary to achieve them ought to be the primary focus of the analyst (Connelly et al., 2009: p. 3). In this study defining the conceptual divide is critical to recognizing the boundary between advocacy coalitions, and understanding why some solutions are pursued over others.

As the conceptual divide between strong and weak sustainability has developed over the course of several decades (or centuries, following Bosselmann), we need to cast a wide net if clear definitions of the elements of each are to be established. Furthermore, given that the practice of sustainability at the
city level involves fields as diverse as solid waste, air quality, transportation, and land use planning, we need to include work from a variety of disciplines while building a definition (Bulkeley & Betsill, 2005: p. 42). Accordingly, authors working in urban planning (Berke & Conroy, 2000; Campbell, 1996; Connelly et al., 2009; Echenique et al., 2012; Haughton & Counsell, 2004; Romero-Lankao, 2012; Roseland, 2012), environmental law (Bosselmann, 2008; Ross, 2009), environmental economics (Ayres, 1993; Costanza & Patten, 1995; Ekins, 1993; White, 2013), policy studies (Genus, 2014; Manzi et al., 2010; Mebratu, 1998; van Staden & Musco, 2010), and environmental science (Marshall & Toffel, 2005; Williams & Millington, 2004; Zellner & Reeves, 2012) have contributed to the eight components defined below.

5.1 Substitutability & Non-Substitutability

This first distinction between weak and strong sustainability is concerned with the natural goods and services that human societies depend upon, such as abundant fisheries, healthy soil, a stable climate, clean water, and so on. These factors must be available at the required time, in sufficient quantity, and of acceptable quality for thriving human settlements to persist over time, and both perspectives on sustainability accept this as axiomatic. The division here is based on assumptions of whether these natural factors can be substituted for by human-devised analogues. Consider this passage from Ayers as establishing the strong sustainability belief that natural factors cannot be replaced:

"The most important scarcities, in the emergent environmentalist world view, are largely outside the market domain: soil fertility, clear fresh water, clean fresh air, unspoiled landscapes, climatic stability, biological diversity, biological nutrient recycling and environmental waste assimilative capacity. There are no plausible technological substitutes for these [emphasis added]" (1993, p. 189).

Ayers does not, however, offer guidance as to the relative substitutability of any of these goods or services, leaving the strong sustainability perspective with a bias towards protecting the integrity of all these forms of natural capital without establishing priorities or boundaries between acceptable and
unacceptable degrees of contamination. An example of this in practice comes from Echenique et al., which models the consequences of different urban forms and identifies the range of negative consequences each carries for natural factors without providing any means of assessing which adverse outcomes are more acceptable than others (2012). A second example which is more in-line with the larger strong sustainability perspective is provided by Zellner & Reeves, who promote no-growth urban planning as a means of respecting the non-substitutable reality of natural goods and services (2012).

This silence on the relative importance of different natural factors is shared by the weak sustainability perspective, which assumes that trade and technology will ensure that all goods and services provide by nature will be replaced by human engineered equivalents when required (Ross, 2009: p. 34-35). More abstractly, the weak sustainability perspective stresses the constructed and contingent nature of the idea of sustainability itself; rather than existing as a law waiting to be discovered, sustainability is “a process of innovation, not of discovering and converting the nonbelievers” (Campbell, 1996). Accordingly, setting firm limits on activities, or the expectations of what is possible, is anathema to implementing sustainability, the nature of which will shift over time as innovations accrete.

5.2 Technological & Behavioral Solutions

As there is a divide in beliefs regarding the ease of replacing foundational natural factors between strong and weak sustainability, so there is a divide in the types of solutions preferred by each perspective. While weak sustainability does not dispute the need for these factors, proponents of this view hold that degradations in quality, quantity, and availability can be reversed through technology-based interventions. The required technologies are often already available, but are not being deployed because of a lack of “political will to implement against ingrained lobbies, and…economies of scale” (van Staden, 2010: p. 47-48). Connelly et al. provide a similar perspective, suggesting that
implementation failures when it comes to deploying sustainable technologies “are based in social processes of decision-making and in the mobilization of institutional resources” (2009: p. 20). A reliance on technology also recognizes and respects the fact that “one cannot undo urban-industrial society,” and is thus a solution-orientation which is better suited to the reality of incremental policy making (Campbell, 1996: p. 302).

Strong sustainability adherents dispute neither human ingenuity or the positive role of technology in improving the human condition. Some, like Ross, argue instead that technological improvements have advanced while “very little attempt has been made to alter human behaviour so that we consumer fewer resources,” and suggest that behavioural interventions are consequently the new low-hanging-fruit of sustainability policy (2009: p. 51). Others are more ambitious, and base their preference for behavioural solutions on a belief that doing so will allow for a new meaning of economic development to emerge, one which is not based on ever-increasing resource requirements. By reducing human demands on the environment – via modifications to consumption, production, and lifestyle patterns – qualitative developments like improvements in population health and access to recreation and leisure activities can be strengthened over time even while quantitative expansions of human systems are curtailed and reduced (Ekins, 1993; Zellner & Reeves, 2012).

5.3 Temporary & Absolute Limits to Growth

The belief in temporary limits to growth held by proponents of the weak sustainability perspective is built on an acceptance of the legitimacy of growth as a primary end of civilization, a goal which must not be abandoned yet must also be balanced with environmental protection and social equity (Bosslemann, 2008). Bulkeley & Betsill found this perspective in operation when reviewing urban planning documents, specifically those which included goals around GHG reductions while simultaneously encouraging population growth onto brownfields. To these authors, “the ‘problem’
remains framed in terms of maintaining and enhancing mobility in order to promote economic
competitiveness in general” (2005: p. 55). A decade earlier, Campbell discussed how urban planning
has often been employed to promote economic interests over social or environmental. Rather than
problematizing this slant however, Campbell shared his “concern about the ramifications of a
sustainable future…[is that] steady-state, no-growth economics would be likely to relegate much of the
developing world – and the poor within the industrialized world – to a state of persistent poverty”
(1996: p. 304). Yates built on this concern by framing sustainability expressly around the needs and
situations of humans, arguing that what requires sustaining is “the abundance that modernity has in fact
accomplished, thanks to human ingenuity and innovation thus far” (2012: p. 22). In sum, limits on
growth under the soft sustainability banner are temporary because the alternative is both unconceivable
and incompatible with the proper ends of society.

As above, strong sustainability proponents do not dispute human ingenuity as a source of
solutions, or growth’s potential to deliver improvements to quality of life. Instead, from this
perspective, the material growth of human societies is constrained by firm environmental limits, limits
which may be temporarily exceed but only at considerable risk. For example, Ayres acknowledged the
real contribution of the green revolution to increasing agricultural yields while also warning of the
diminishing returns and increasing vulnerability created by such a strategy, specifically arguing “the
ture ‘limits to growth’ are…subtle” (1993: p. 196). Systems, through their over-reliance on a
characteristic (such as a resource, or mode of production) develop points of vulnerability incrementally
and beneath the sight of routine perception. That the process is subtle makes it all the more difficult, in
a political sense, to galvanize actors to shift the system’s functioning.

Others speak more directly to the claims made by weak sustainability advocates regarding
growth as the end of society. Bosselmann writes about the need to reject growth and replace it with the
maintenance of ecological integrity over all other goals; equity and prosperity are not unimportant, but
they are secondary and cannot be bought by diminishing ecological sustainability, on which all other systems are based (2008: p. 22). Yates argued that sustaining nature’s limits is the goal of sustainability, one arrived at after judging “claims of abundance to be illusory” (2012: p. 20), while Ross emphasized that any plans to encourage growth needed to occur in the context of a “discussion of trade-offs within the ecological limits of the Earth (2009: p. 38). Strong sustainability proponents are more ready than their counterparts to discuss the creation of an approach to “economic development…based on concepts other than a form of growth that encourages the use of more resources…” (Zellner & Reeves, 2012: p. 545).

5.4 Anthropocentric & Ecocentric Valuations of Nature

The final divide between the strong and weak sustainability perspectives is based on values. A weak interpretation of sustainability sees environmental goods and services from a strictly anthropocentric perspective, and possessing value only in use or exchange. A fish has value because it can sustain the life of a human; a greenbelt around a city has value because it provides surrounding residents with recreational and aesthetic opportunities. If the fish generates more value as a feedstock for cattle, or the greenbelt as a site for condo development, then they both ought to be reallocated to the uses which provide greater economic value. The core assumptions here are that humans are exist separate from nature, that humans assign value to environmental goods and services, and that this actor’s valuation shifts over time and cultural context (Campbell, 1996; Marshall & Toffel, 2005; Williams & Milligton, 2004). These assumptions are embedded in policy processes and outputs which focus on human wants with no consideration given to potential ecological impacts, save where those impacts affect human wants (Berke & Conroy, 2000; Echenique et al., 2012).

Subscribing to the strong sustainability outlook means assigning inherent value to environmental goods and services, and recognizing nature has “a right to remain unmolested that does
not require justification in human terms – just as there are inalienable 'human rights' that require no justification” (Williams & Millington, 2004: p. 102). From this view, human intervention into and disruption of natural systems must be justified, not the preservation of those natural systems, making for an “essentially ethical discourse” (Bosselmann, 2008: p. 9). The institutionalization of strong sustainability would see such an ethic incorporated into everyday decision-making not as an additional consideration, but as the foundation and most critical test of a decision’s legitimacy (Roseland, 2012).

6. A Case Study of Saskatoon

Two issue spaces relevant to municipal sustainability will be discussed here; solid waste management, and public transportation. As discussed in the Methods section, these issues were selected following a preliminary scan of policy debates in each city, with an eye to selecting the two issues that, on the surface, clearly included a concern with sustainability. Active debates will be focused on in each area, ongoing events which provide a wide range of actors, beliefs, and instances of coordination for discussion. While the intensity of the conflicts examined here do occasionally flare up, and the participation of actors is fairly constant, the degree of coordination and severity of boundaries between camps is not significant enough to justify a firm identification of advocacy coalitions in either policy subsystem. This is a key finding of the study, and will be discussed at length in subsequent sections.

6.1 Saskatoon’s Journey to Curbside Recycling

Here, we will focus on Saskatoon’s most significant solid waste policy debate, namely the creation of a City-funded curbside recycling system. This story features a diverse cast of characters, played out over more than a decade, and was fraught with missteps and redirections. By 2012, the City
of Saskatoon had its own curbside system, but not without sparking significant controversy in the process.

Diverting material from the municipal landfill was an identified priority as early as June 2000, when council endorsed a 20-year plan to reduce waste. At the time, the only option for recycline in Saskatoon was a municipal depot system; residents would bring their recyclables to depots located across the city and sort their material into bins. Expanding this network would extend the operational life of the municipal landfill. Pawel Kerc, manager of the city’s environmental compliance branch, explained that the plan was driven by changing public expectations regarding waste management practices, and expressed hope that it would encourage residents to participate in recycling programs. This hope was shared by Joanne Fedyk of the Saskatchewan Waste Reduction Council – one of the external organizations who had participated in consultations on the plan – who claimed “we think the landfill is the last resort...[and] anything we can do is better” (McNairn, 20 June 2000; McNairn, 24 October 2000). Weaknesses with this plan were quickly identified by city administrators, who found the depot system was failing to divert a significant amount of waste. Officials blamed this situation on the haphazard assortment of diversion programs, with different non-profits responsible for collecting and processing different materials, but also on the fact that per capita waste generation had increased by 20 per cent between 1996 and 2001. Four solutions were proposed: expand the neighbourhood depot network; work with the provincial government to develop incentives for waste reduction; pass bylaws to prohibit depositing yard waste in the collection stream; and, what would eventually become the selected option, investigate curbside recycling (Parker, 22 September 2003).

Saskatoon residents did have another option when it came to recycling, however; Saskatoon Curbside Recycling (SCR) opened its doors in 2003 and began providing contract service in the city. Owner Tyler Whale claimed SCR would collect all the same materials which could be taken to the existing depots – newsprint, cardboard, and beverage containers – but also plastics and glass, materials
which Ed Schille of Cosmo Industries had said were unrecyclable because of a lack of market less than a month prior to Whale's announcement (Nickel, 10 January 2003; Nickel, 23 January 2003; Hanley, 20 May 2000). Another Cosmo representative, waste reduction manager Ed Steckler, was also dismissive of SCR's prospects, claiming "blue box doesn't work…[and] blue box is way too expensive," while also expressing fears that SCR could eat into Cosmo's revenues if they collected material which would otherwise go to the neighbourhood depots (Nickel, 23 January 2003). Cosmo’s concern was based on their existing relationship with the City, under which they collected material from the depots and provided work for people with intellectual disabilities.

Newly elected Mayor Don Atchison was quick to quash any notion of the city getting involved with curbside, however, claiming it would be cheaper to sort recyclables at the landfill rather than collect them door-by-door, a claim he had also made during his election campaign (Nickel, 8 October 2003; Nickel, 17 November 2003). Atchison's disinterest did not dissuade Tyler Whale, however, who made direct presentations to council asking for support in advertising him company's service, and argued in public that "as a city we're well behind the times in recycling…[residents] can throw it in the garbage for free right now…they think it's their right…why is it your right to throw things away irresponsibly?" (Taylor, 15 December 2003; S-P Staff, 17 December 2003). Whale also pushed the city to open a municipally-run composting depot, arguing that SCR could collect at a lower price than city employees and still increase Saskatoon’s waste diversion rate. Councillor Tiffany Paulsen supported Whale’s proposal, suggesting that the revenue produced by selling compost could be reinvested into additional waste diversion programs (French, 18 April 2005; S-P Staff, 20 April 2005).

Curbside recycling was a part of councillor-turned-mayoral-candidate Lenore Swystun’s 2006 campaign platform, and while her bid was unsuccessful, council did see the addition of two pro-curbside actors; Charlie Clark and Darren Hill (Bernhardt & Warick, 26 October 2006; Coolican, 31 August 2006; Petrich, 27 October 2006; S-P Staff, 6 October 2006). The re-elected Don Atchison
suggested the city may implement curbside, and SCR claimed to be investing in equipment upgrades to be ready for the change (Bernhardt, 27 October 2006; Coolican, 31 October 2007; Coolican, 3 January 2008; Kyle, 7 August 2008).

Following the 2006 election, there was little activity on implementation of a curbside system. Leading up to the 2009 municipal contest, however, several new candidates and incumbent councillors indicated that they would make implementation of curbside recycling a part of their election platform. In a letter to the editor of the Star Phoenix in February, Ward 4 candidate Sean Shaw – also of Saskatoon Cycles and the city's Environmental Advisory Committee – argued that the existing system of recycling depots was not working to increase Saskatoon's waste diversion rate, and claimed that potentially recyclable materials accounted for 40% of the city's waste stream. Were current policies to continue, Shaw claimed that the municipal landfill would be full within 20 years, and replacing it could cost up to $100 million (Shaw, 12 February 2009). That same month, Councillors Tiffany Paulsen and Darren Hill announced curbside recycling would be a focus of theirs if returned to office (Nickel, 14 February 2009). Lenore Swystun returned for a second run at the mayor’s chair, again making curbside part of her platform and arguing that Saskatoon’s diversion rate of 10% was one of the lowest in Canada (Hutton, 13 October 2009; Hutton, 20 October 2009).

Mayor Atchison’s campaign disputed the landfill was approaching capacity, and promoted expanding the existing depot system to increase the waste diversion rate while avoiding the cost of a new program (Hutton, 28 February 2009; Hutton, 13 October 2009). Peter Girrard, executive director of Cosmopolitan Industries, supported Atchison’s proposal as it would mean more employment opportunities for intellectually disabled persons in Saskatoon, and also reiterated the incumbent mayor’s warning on the cost of a curbside system (Hutton, 28 February 2009; Stensrud, 21 October 2009). Councillors Glenn Penner and Myles Heidt, running for re-election in 2009, also shared
Atchison’s position, with the latter suggesting that residential recycling pick-up would cost between $20 and $30 a month (MacLean, 15 October 2009; MacLean, 16 October 2009).

Cosmo was a consistent presence at public consultations on curbside recycling over the fall of 2010, and its representatives appeared frequently in the letters section of the Saskatoon Star-Phoenix, the city’s paper of record. For example, Ken Gryschuk was speaking on behalf of Cosmo when he dismissed the results of an administration survey on public support for curbside, arguing the system would force Cosmo out of business; Cosmo representatives also dismissed promises made by the administration that the non-profit’s role in processing recyclables would not be harmed by the change (Stewart, 16 August 2010; Warren, 17 August 2010; MacLean, 9 September 2010; Gillis, 10 September 2010).

When city administrators released their report on the projected cost of curbside service (at $4.24 per household, it was well under the figures tossed out by candidates in the 2009 election), they also identified the conditions under which they would hire a contractor to deliver the service. The winning bid would need to deliver 7,800 tonnes of paper to Cosmo for processing, the maximum amount the non-profit could process in a year (Warren, 20 May 2011; Warren, 25 March 2011). Counsellors opposed to the program attempted to build roadblocks, with Councillor Maurice submitting a motion to put the change to a referendum, a motion which was defeated at council and ridiculed in the press (Warren, 11 May 2011; Warren, 25 March 2011; S-P Editorial Board, 14 May 2011). Councillor Myles Heidt submitted a motion which would delay implementation a greater role for Cosmo could be built into the RFP; when this motion was defeated, Mayor Atchison stated, “I can't believe we'd want to turn our backs on [Cosmo] after 30 years" (Warren, 14 June 2011). Cosmo built on this narrative, issuing a press release that claimed, "adults with intellectual disabilities are [being] shut out from benefiting from the future economic and population growth in Saskatoon" (Hutton, 15 June 2011). When council formally decided to go ahead with the RFP in late 2011, Mayor Atchison stressed that the city city was
not committed to implementing any program at all, and that if bids did not meet the city's price requirements, they could be rejected outright (Hutton, 29 November 2011; Hutton, 31 December 2011).

Altogether, city administrators received eleven bids from five different companies interested in delivering Saskatoon's curbside recycling program. Bids were judged on program cost, environmental impact, convenience for users, material collected, economic viability, and the bidding company's track record (Hutton, 23 March 2012). Loraas Disposal emerged as the winner, with the company pledging to deliver services to each of Saskatoon's single-family homes, beginning in January 2013, for less than the city's set price of $4.24 per home, per month (Hutton, 13 April 2012; Hamilton, 29 November 2012). Cosmo wasted no time in criticizing the outcome of the bidding process, with community relations manager Ken Gryschuk claiming "the recommendation reverses over three decades of progress for adults with intellectual disabilities," and arguing that "we really don't believe this action reflects the wishes of the residents of Saskatoon" (Hutton, 13 April 2012). Gryschuk also criticised the process by which the recommendation was arrived at, claiming that Cosmo had raised objections to the evaluation system early on, calling it "very subjective" and claiming that "we told them it was not representative of the way things should be evaluated" (MacLean, 16 April 2012). Jeff Jorgenson, manager of utility services and the overseer of the evaluation process, rejected Gryschuk's claims, and claimed that Cosmo never raised any concerns with the scoring system before or during the RFP process (MacLean, 16 April 2012).

This sustained opposition had a clear impact on policy. Council voted to award the contract for curbside service to Loraas disposal, but only following a last-minute amendment to the motion made by Councillor Pat Lorje. Under the ‘Cosmo Compromise,’ the non-profit would be granted a concession to collect and process recyclables from Saskatoon's multi-unit dwellings and recycling depots no later that May 2012. This concession was presented for council’s consideration only 45 minutes prior to the meeting at which the Loraas recommendation was to be debated, and approved unanimously at that
same meeting (Warren & Hutton, 17 April 2012). The amendment had been developed jointly by Lorje and Cosmo board member Mike Stensrud the weekend prior to council's meeting, the latter of whom warned that a "bloodbath" would have resulted had council approved awarding the contract to Loraas without giving multi-unit recycling to Cosmo (Hutton, 18 April 2012). The Cosmo Compromise was praised by the editorial board of the Star-Phoenix, while Gerry Klein warned separately that the multi-unit program would not be subject to the same rigorous evaluation process and may be deficient as a result (S-P Editorial Board, 18 April 2012; Klein, 19 April 2012).

However, this was not the end of political tension over recycling in Saskatoon. In the fall election, incumbent councillors Clark and Darren Hill were both accused of attempting to destroy the non-profit, with Clark's main opponent Branden Snowsell distributing fliers containing the claim, and arguing that Clark's support of single-stream recycling would have been the end of Cosmo's programming. Clark defended himself, saying that "if you're going to make an allegation like that you have to explain what you're talking about," and claimed that the 7,800 tonne guarantee would have protected Cosmo from harm caused by the city's new recycling initiatives (Hutton, 22 October 2012). Hill's main opponent, Robin Bellamy, relied on automated phone calls which asked "do you really want to re-elect a councillor that was prepared to dismantle Cosmo Industries or do you want to vote for Robin Bellamy who rode all the way to Regina in support of Cosmo Industries?" (Warren, 23 October 2012). Hill's defense was largely the same as Clark's, and involved Hill pointing to his support of the no-harm motion and the 7,800 tonnes promise (Warren, 23 October 2012). Both Hill and Clark were returned to office by voters.

6.2 An ACF Discussion of the Curbside Recycling Debate in Saskatoon

We now move to discussing the events described above using the language of the Advocacy Coalition Framework. The intention here is to divide actors into competing coalitions, identify their
beliefs, point out instances of beliefs being shared across actors, and identify instances of coordination among the actors. The coalitional split is between those who supported curbside recycling, and those who did not, and it ought to be stressed that clear boundaries between each group only appeared in the later part of the period. The membership of the pro-curbside camp included:

- Tyler Whale of Saskatoon Curbside Recyclers
- Brenda Wallace of the city's environmental services branch
- Jeff Jorgenson of the utility services department
- Councillors Tiffany Paulsen, Charlie Clark, Darren Hill, and Pat Lorje
- Sean Shaw and Lenore Swystun, candidates for council and mayor respectively
- Gerry Klein, civic affairs columnist at the Star-Phoenix
- Paul Hanley, the paper’s environmental, and
- the editorial board of the Star-Phoenix

Speaking in 2003 about the start-up of Saskatoon Curbside Recycling, Whale offered a clear indictment of the recycling status quo:

"As a city we're well behind the times in recycling...I hate to say it, but they [residents] can throw it in the garbage for free right now...They think it's their right. But at the same time, why is it your right to throw things away irresponsibly?" (Taylor, 15 December 2003).

For Whale and SCR, the act of recycling is a positive obligation and a practice of citizenship. With this statement, we see an example of deep core beliefs on display, as Whale is sharing his understanding of the citizen’s role in the city and in ensuring environmental quality. A good citizen behaves responsibly by minimizing the environmental consequences of their consumptive choices. Furthermore, Whale wedded this deep core belief to a consistent policy core preference in curbside recycling, a necessarily more coercive approach than the city’s status quo approach of operating a system of neighbourhood depots. The Star-Phoenix echoed Whale’s belief, though in a limited way. In the board’s view, “Saskatoon residents have always demonstrated a willingness to go the extra mile to help protect the environment,” and it’s the ‘extra mile’ part of their statement which deserves emphasis (S-P Editorial Board, 14 August 2002; S-P Editorial Board, 15 September 2003). While the board
believed that city residents were interested in actively doing good, they also believed that this deliberate effort would be extraordinary, or surplus to the requirements of citizenship. Residents who did not participate in waste diversion programs would not be doing anything wrong, they simply would not be doing extra good. This suggests a certain valuation is being placed on waste diversion programs, one which ranks their necessity as lower than others because the benefit or outcome provided is not critical to the city's needs. Accordingly, these statements suggest that while expanded recycling programs do not conflict with the deep core beliefs of the editorial board, they would clash with that organization's policy core beliefs if the costs of the programs exceeded some undetermined threshold or diverted resources from other, more highly-valued programming.

Whale also attempted to engage in hard coordination with city administration via formal requests to city hall for direct support in expanding SCR's subscriber base (S-P Staff, 17 December 2003). The support given SCR by Star-Phoenix environmental columnist Paul Hanley wrote in support of relying SCR to deliver a city-wide curbside collection service, another example of hard coordination (Hanley, 20 May 2003; Hanley, 2 March 2004).

Of the elected class, Councillor Paulsen was the single most consistent supporter of expanding recycling services, voicing a belief that increasing the city’s waste diversion rate was critical to avoiding the cost of replacing Saskatoon’s landfill: “…we’re coming to a point now where there’s a bigger cost in filling up our landfill…We need to start looking at creating ways to divert waste out of the landfill” (Simpson, 28 July 2005). Here, the pro-environmental behaviour of recycling and waste diversion is a means to the end of cost avoidance, a historical concern of municipal governments with limited revenue streams. Paulsen’s beliefs are being expressed here as policy core preferences, in that they involve new programming being delivered by the city, but they do not represent a fundamental challenge to the status quo of what issues should preoccupy a municipal government. In an example of soft coordination, Paulsen was supported by civic affairs columnist Gerry Klein (Klein, 21 November
2007); in a second example, and one that transcends coalitional boundaries, Councillor Myles Heidt, who stressed that citizens would only be willing to accept user-pay if they saw a coinciding reduction in their property taxes (Coolican, 31 October 2007).

During the 2009 municipal election, Darren Hill and Sean Shaw engaged in soft coordination when each made city-funded curbside service part of their election platforms, also an example of policy core beliefs (Nickel, 14 February 2009; Hutton, 28 February 2009). Shaw used the language of cost avoidance to justify his preference, arguing that "we cannot afford the environmental and financial costs of the recycling depot system, no matter how it is organized" (Shaw, 12 February 2009); the overlap with Councillor Paulsen’s argument above is obvious, and another example of a curbside proponent using pre-existing policy concerns to justify new programming. City utilities manager Jeff Jorgenson helped normalize Shaw and Hill’s policy preference by claiming it as his preferred model as well, even as a review of possible policy fixes was ongoing (Hutton, 28 February 2009).

The inconvenience of the depot system was another belief that tied members of the pro-sustainability coalition together. Sean Shaw argued that "the depot system…[is] a barrier for a lot of people to recycle and it's much easier for people right now to just throw it in the garbage" (Hutton, 13 October 2009). Councillor Paulsen, returned after the 2009 election, echoed Shaw’s language on systemic inconvenience preventing Saskatoon from improving its waste diversion rate (Hutton, 27 February 2010; Hutton, 23 October 2010), as did Gerry Klein at the Star-Phoenix (22 July 2010), and mayoral candidate Lenore Swystun (Hutton, 13 October 2009). When the City began the process of soliciting bids for curbside service, system convenience was included as a criterion by which curbside proposals would be evaluated by the city (Hutton, 23 March 2012), and the eventual selection of Loraas Disposal Services was justified by the City’s manager of environmental services, Brenda Wallace, on the grounds that “because it is a program that has been designed for convenience, we think people are going to want to put material in there" (Hamilton, 13 December 2012). This is an extraordinarily broad
collection of actors expressing shared policy core and secondary beliefs, and includes members from both inside and outside the official policy process. Notable too is that this belief was expressed repeatedly over the entire period, suggesting it was a central organizing idea for the pro-curbside coalition to organize around.

A concern with avoiding the cost of replacing the existing landfill has already been noted as a unifying belief, but it also provides an opportunity to point out inconsistencies across policy actors’ understanding of the issue space. For example, Jeff Jorgenson claimed Saskatoon's municipal landfill had only 12 years of operating life left if 2009 waste diversion practices were maintained, and could cost upwards of $75 million to replace (Hutton, 10 November 2009). Ward 4 candidate Sean Shaw claimed the landfill would be full in 20 years and cost tens to hundreds of millions to replace (Shaw, 12 February 2009; 5 August 2010), while Brenda Wallace warned that the landfill had between ten and twelve years of operational life remaining (Hutton, 4 December 2010).

Similar gaps in subsystem understanding were evident when it came to the city’s current waste diversion rate. Mayoral candidate Lenore Swystun claimed it was 10%, one of the lowest in Canada, while Sean Shaw argued it was 18% (Hutton, 20 October 2009; Shaw, 5 August 2010). Jeff Jorgenson agreed the rate was inadequate and lagged similar cities, but pegged it at 19% (Hutton, 10 November 2009). Six months later, city administrators claimed the diversion rate was 23% in materials produced to accompany public consultations on expanding recycling programming (Hutton, 26 May 2010). While working on the MOU between the city and Cosmo on multi-unit recycling, Brenda Wallace identified the city's waste diversion rate as being 23% (Hutton, 19 April 2012). While the actors identified here all shared a belief that the city’s waste diversion rate was unacceptable, the significant differences in their detailed understanding of the issue’s characteristics suggest the existence of a nascent, rather than mature subsystem.
The coalition of actors opposed to curbside is far smaller, and as above, only becomes more active in the latter part of the study period. Here, the participants include:

- Mayor Don Atchison
- Councillors Myles Heidt and Maurice Neault
- Cosmopolitan Industries

Mayor Atchison was consistent in framing his opposition to curbside along two lines of argument. First, that the service would be too costly for the City to provide. Second, that implementing a curbside recycling program would cause unavoidable and irreparable harm to Cosmopolitan Industries. Atchison first expressed his beliefs on the costliness of curbside when he first became mayor in 2003 (Nickel, 17 November 2003). He reiterated this belief in 2009 when he claimed curbside service would cost Saskatoon households $12-$30 per month, and argued curbside proponents were comfortable with drastically increasing the annual minimum property tax increase (Hutton, 13 October 2009). Even after the City began soliciting bids for curbside service at less than half of his projected cost, Mayor Atchison continued to express this belief in public (Hutton, 27 March 2010; Hutton, 31 December 2011; Hutton, 29 November 2011). While expressing this belief, the mayor did not address the costs – financial or environmental – of replacing the city landfill if the city’s diversion rate was not increased, suggesting he was fixated on one type of knowledge (costs of action) over another (benefits of action). Whether he rejected the latter type of information altogether cannot be determined through content analysis alone, thus we are left to label the belief outlined here as a policy core preference.

Councillors Heidt and Neualt engaged in soft coordination by using similar language as the mayor, with Heidt arguing before and after the 2009 election that "everybody wants to recycle, but not a lot of people want to pay for it" (MacLean, 16 October 2009; Hutton, 2 February 2010; Hutton, 15 May 2012). Councillor Neualt demonstrated his membership of the anti-curbside coalition through soft coordination on shared language, but he also created an opportunity for hard coordination when he
proposed holding a referendum before signing a service contract for curbside service (S-P Editorial Board, 14 May 2011; Warren, 25 May 2011).

The last comment on beliefs of the excessive cost of curbside go to Cosmopolitan Industries, who held this position while praising the relative affordability of the existing depot system (Nickel, 23 January 2003; Nickel, 17 November 2003). Interestingly, Cosmo’s representatives were inconsistent in the figures they used to project the cost of curbside, arguing at points that it would cost $300, $400, or more than $1,300 per tonne of collected material to operate the system, but were consistent in pegging the current system’s cost at $8 per collected tonne (Stensrud, 21 October 2009; Gerrard, 22 February 2010; Nickel, 30 July 2010). This behaviour is like that of Mayor Atchison, where the knowledge of costs is valued more than the knowledge of benefits. Whether Atchison and Cosmo deliberately coordinated on promoting this problem framing is unknowable, hence it can only be labeled as an example of soft coordination.

Like the pro-curbside coalition's repeated warnings on landfill replacement costs and expected operational life, the anti-curbside coalition used inconsistent figures to deliver its warnings on the cost of curbside recycling. Attempting to resolve this inconsistency was not attempted by coalition members – reinforcing a pattern of soft coordination appearing more often during content analysis than hard coordination – perhaps owing to the absence of an overarching coalition organizer. Also of interest was the anti-curbside's rejection of official figures on program costs, specifically those produced by the administration. Rather than accept the loss of an issue frame (‘curbside is prohibitively expensive’) due to issue closure (the cost of curbside service) and attempt to replace it with another issue frame, anti-curbside coalition members maintained their commitment to the original frame. This behaviour is congruent with the ACF's expectation that policy positions are more based on slow-to-change belief structures rather than rational calculation of apolitical facts.
Another interesting characteristic of this coalition’s belief regarding the cost of curbside was its exclusive focus on program costs, with no attempt to recognize or assess potential program benefits. Even though pro-curbside coalition members provided inconsistent figures on the landfill's remaining operational life and its replacement costs, the official administration position did hold that the landfill was nearing its end and would be considerably challenging to replace in both a financial and political sense. Anti-curbside coalition members did not acknowledge this suggestion by either accepting or rejecting it; in short, they were purposefully silent on this issue, and chose to promote a course of action (reject curbside recycling) which may immediately open a new issue (how to replace the landfill). Had the anti-curbside coalition been more successful at achieving their policy ends, we may have been provided with an opportunity to observe how policy decisions at time one create or exacerbate issues at time two without the considerable time lag typically associated with such causal chains. Again, this lack of consideration of costs against benefits is consistent with ACF’s expectations that policy preferences are more about values than rational calculation.

The second issue frame promoted by members of the anti-curbside coalition involved a belief that a mandatory curbside collection program would cause unavoidable and irreparable harm to Cosmopolitan Industries, and that the possibility of this harm provided sufficient justification to reject the program outright. This theme was promoted by multiple actors, including Mayor Don Atchison (Hutton, 13 October 2009; Hutton, 14 January 2010; Hutton, 17 April 2012), Councillor Myles Heidt (Hutton, 18 January 2011; Warren, 14 June 2011) and, of course, Cosmo itself.

For example, during the 2009 municipal election, Cosmo representative Mike Stensrud warned that a single-stream curbside system, and the sorting machinery it would require, would have "little need for workers and certainly is not a fitting environment for the intellectually disabled…The environment is more important than human greed but is it more important than…helping those less fortunate?" (Stensrud, 21 October 2009). The belief that curbside would harm Cosmo’s clients, and that the system
could not be designed in such a way that the harm could be avoided, was he core of Cosmo’s argument against curbside over this period (Gerrard, 22 February 2010; Klein, 22 July 2010; Nickel, 30 July 2010). Cosmo’s representatives and supporters were quick to deploy it whenever the opportunity arose, such as in response to a public opinion survey which found single-stream curbside was the most popular option with residents (Stewart, 16 August 2010), during municipal open-houses on improving waste diversion services in Saskatoon (MacLean, 9 September 2010), during the City’s development of the curbside RFP (Warren, 25 May 2011; Hutton, 15 June 2011), and, finally, following the City’s selection of Loraas as the winning bid (Hutton, 13 April 2012).

On sheer volume of comments and consistency of participation in the policy process, it is not an exaggeration to call Cosmopolitan Industries the organizing member of the anti-curbside coalition. Their belief that curbside would cause irreparable and unavoidable harm to their clients can be understood as a deep core, policy core, and secondary belief. It represents a deep core position because it reflects a fundamental idea of the purpose of government in general; to ensure that individuals with intellectual disabilities are not isolated from everyday life. This deep core belief found expression in policy core preferences by combining the need to avoid social isolation with the need to process recyclable materials. Secondary beliefs came into play during discussions of instrument settings; depot collection over curbside, separated collection over single-stream, human labour over mechanized sorting of collected materials. No other actor displayed such a complete range of beliefs, and while the pro-curbside coalition was ultimately successful in seeing their policy preference acted upon by city council, Cosmo forced policy changes which ensured its preferences were also enshrined in the final output.
6.3 Public Transit & Public Subsidies in Saskatoon

In this section, we will focus on the City of Saskatoon’s halting progress towards developing a bus rapid transit system, or BRT, a related policy conversation regarding how much public money ought to be directed to Saskatoon Transit, and the gradual emergence of developing ‘alternative transportation’ networks as a policy debate. BRT’s objective was to increase Saskatoon Transit’s ridership by shifting from a coverage model of service – where routes go into every neighbourhood, but transit times are slow – to an intensity model, where the network focuses on connecting busy destinations to dense residential centers, shortening commutes by focusing resources to areas of highest usage. Debates over transit fares and the public ‘subsidy’ directed to Saskatoon Transit were based on different ideas of the service’s necessity and co-benefits. Finally, ‘alternative transportation’ refers to the cycling and pedestrian transportation networks that provide for options beyond the personal auto.

The shift towards BRT began as transit ridership was dropping to historic lows; according to city officials, Saskatoon Transit lost nearly half of its riders over ten years, a trend attributed to "urban sprawl, increased car ownership, fare increases and service cuts" (Parker, 22 September 2003). Following his successful mayoral bid, Don Atchison identified transit improvements as being a high priority of his first year, claiming that "the way we have it not, I just see this being a bottomless pit of money" (Nickel, 30 October 2003; Nickel, 8 October 2003). The new council commissioned a study of Saskatoon Transit intended to address its ridership issues the implementation of a BRT system, a change endorsed by Atchison on the grounds it would make public transit almost as fast as personal autos (S-P Staff, 14 August 2004; Nickel, 24 November 2004).

This and other proposals for route redesigns and service changes came as ridership levels continued to decline, again attributed by city officials to fare hikes, urban sprawl, and the slow roll-out of transit services to new neighbourhoods (Nickel, 1 November 2004). Less than a month after the administration delivered these findings, council moved to hike fares to avoid raising property taxes, a
change which administration estimated would cost the service another 1.5 per cent of its current ridership, on top of the 2 to 3 percent decline expected for 2004. While Councillor Myles Heidt opposed the hikes on the grounds they would further erode the service's user base, Mayor Atchison rejected the claim that fare hikes would reduce ridership, arguing that "if you look at what it costs to operate a vehicle, transit is still the best deal in town" (Nickel, 23 November 2004; Nickel, 30 November 2004). Civic affairs columnist Gerry Klein also opposed the hike as reinforcing the relative disadvantages of transit in comparison to the private auto, and accused council of a "lack of vision," arguing that "it is short-sighted to erode a service, make the poor pay fees they can ill afford, transfer the cost of these decisions to a select few and bet on future changes to recoup losses imposed by current inadequacies" (Klein, 8 December 2004; Klein, 24 November 2004).

Transit fare hikes occurred several times between the early 2004 and 2012, and each time the same justifications and condemnations were offered. For example, a hike in 2005 was opposed by Councilors Elaine Hnatyshyn and Gordon Wyant for its negative impact on seniors, students, people on low income, and because a hike was in contradiction of municipal objectives around increasing ridership (Coolican, 5 November 2005). Gerry Klein again wrote in opposition to the increase, arguing:

"This is a tremendous drop for which we all pay, either in higher tax rates as we struggle to build and maintain the roads and bridges required to carry all these extra people, or in frustration, gridlock and damaged air quality." (Klein, 2 November 2005)

Fare hikes occurred simultaneously with service redesign and expansion, the first strong example of serious change occurring in 2005 when Saskatoon Transit manager Charles Stolte announced that the following year would see the implementation of a complete overhaul of transit routes and schedules in Saskatoon, built largely around the concept of bus rapid transit (Nickel, 17 May 2005; Coolican, 1 November 2005). This plan was based on the report mentioned above, one which
Mayor Don Atchison said was supposed to provide solutions as if Saskatoon had no existing transit system (Nickel, 12 May 2005). This editorial board of the Star-Phoenix signaled support for this approach even before council approved it, arguing that the long trend of declining ridership was due to the service's slow speed and cumbersome route system, while Wade Coombs, transit operations manager, promoted the changes by arguing "the more Saskatonians take the bus, the lower the city's taxpayer-funded subsidy of the transit system will have to be, and I know everybody would like to see that" (Coolican, 31 March 2006, S-P Editorial Board, 7 March 2005).

This shift and other changes, such as the creation of a universal bus pass for students at the University of Saskatchewan in 2009, led to a surge in ridership at Saskatoon Transit. This surge came with downsides for customer service, however, prompting Councillor Tiffany Paulsen to ask for an investigation into why the service was receiving an “unacceptable” number of complaints from users (Hutton, 9 February 2011). Transit manager Mitch Riabko explained that keeping up with peak demand was becoming more difficult because of the service’s fleet replacement policy, one which resulted in Saskatoon Transit’s buses having the highest average age of similar fleets in Canada. Riabko also explained that the fleet lacked the equipment necessary to tweak routes to meet shifts in real-time demand; a pilot project which would have seen GPS units installed in city buses had been postponed in the previous year's budget, and was still waiting for implementation (Hutton, 9 February 2011).

Following Councillor Paulsen’s request for an investigation, Riabko brought a plan to council which he claimed would address the complaints of users while also saving Saskatoon money. Riabko’s plan would end service after 10pm, cut the city’s low-income bus pass, and eliminate some routes altogether, proposed changes which Councillor Myles Heidt were difficult to understand but still worth supporting, saying "if it works, great…if it doesn't, don't blame us" (Hutton & Heroux, 3 May 2011; S-P Staff, 10 May 2011; Hutton, 12 July 2011).
Again, a fare hike was proposed to offset the cost of system changes. Mitch Riabko’s plan included a recommendation that user fees be increased, generating $1 million in new revenue and further reducing the public subsidy directed to Saskatoon Transit (Hutton, 7 December 2011). This recommendation followed council’s decision to raise fees the previous year, again based on advice from Riabko that doing so “will help to offset any impact to the mill rate,” a position supported by Councillor Glen Penner and the majority of his colleagues (Hutton, 7 November 2009; S-P Staff, 17 November 2009). This concern with controlling the public subsidy provided to Saskatoon Transit was opposed by Councillor Charlie Clark and the editorial board of the Star-Phoenix, both of whom shared a concern that raising fees and cutting routes would prevent the city’s public transit system from attracting new, regular service users (Hutton, 7 November 2009; S-P Editorial Board, 28 November 2011). Bob Patrick, professor of urban planning at the University of Saskatchewan, also opposed Riabko’s plan because it failed to entrench public transit as the default mode of transportation in new residential developments (Patrick, 9 December 2011).

This segues into the next collection of events organized around a shared concern with what principles ought to drive a redesign of Saskatoon Transit and the city’s transportation system more generally. Councillor Charlie Clark consistently placed emphasis on making alternative modes of transportation the default, such as in 2009 when he argued the City ought to plan and invest in a future with fewer cars and more cyclists and pedestrians (Nickel, 11 February 2009; Hutton, 6 June 2009; Warren, 15 July 2009). Clark was supported by University of Saskatchewan professors of urban planning Bob Patrick and Ryan Walker, who argued Saskatoon’s historical focus on designing transportation systems around the needs of cars "has inevitably impacted air quality, greenhouse gas emissions, and physical activity levels" (Walker & Patrick, 20 February 2009). Clark’s position had support among his colleagues as well, with Councillors Hill, Penner, and Lorje all suggesting that Saskatoon "stop thinking the car is king" (Atchison et. al., 12 March 2009; Neault et. al., 13 March
In the same year, Mayor Atchison, along with Councillors Dubois, Heidt, Neault, and Pringle, suggested that while Saskatoon did need to invest in its public transportation system, making alternative transportation the default was unnecessary (Atchison et. al., 12 March 2009; Neault et. al., 13 March 2009).

The following year, a public consultation series called ‘Saskatoon Speaks’ saw numerous actors criticize the city for emphasizing vehicle infrastructure over support for cycling and pedestrian transportation. Professor Bob Patrick warned that "the traffic woes of Saskatoon will not go away by adding more roadways," but rather that "planning for people, not cars" would generate real solutions (Patrick, 9 September 2010). Tom Wolf, only a few weeks away from declaring his candidacy for mayor, argued that the consultation process had revealed a plurality of residents wanted to see increased investment in cycling and pedestrian infrastructure, and repeated Patrick's claim that the city could not build its way out of traffic congestion (Wolf, 25 September 2010). The Star-Phoenix invited several local thinkers to contribute to a series inspired by Saskatoon Speaks, with many of these echoing Patrick and Wolf's emphasis on moving away from transportation systems built around the private auto. Rachel Engler-Stringer, a professor at the University of Saskatchewan’s college of medicine, emphasized the environmental and health benefits of removing cars from the road, while local business owner Christopher Doll criticized the city for having cycling infrastructure which did not meet the needs of its community of active commuters (Hutton, 1 October 2010). From the Saskatoon Speaks process itself, consultation leader Mark Reid revealed that improving active transportation infrastructure across the city was a common priority of many participants (Hutton, 2 October 2010).

Support for dramatic system redesign also came from within the civic administration, as reflected in city manager Murray Totland’s 10-year strategic growth plan. One of the plan’s overarching themes involved the need for Saskatoon to become a “little more people-oriented and little less car-oriented” over time (Hutton, 25 January 2012; Hutton, 27 October 2012). Setting targets on
transit ridership and modal share would be a responsibility of council, with Councillor Charlie Clark suggesting that he wanted to see aggressive targets established to reduce the share of commuter trips taken by personal vehicle, estimated at the time to be 85% of the total, thus saving money by avoiding the need for new roads (Hutton, 27 January 2012; Hutton, 27 October 2012). Totland also recommended the City restart efforts on implanting BRT as the default mode of operation for Saskatoon Transit, suggesting that it was the most cost-effective option for a city of Saskatoon’s size and that the system could be operating by 2015 (Hutton, 15 March 2012; Hutton, 16 March 2012). A necessary feature of any transit redesign was that it compete “on fair and equal footing with the private auto,” according to Totland, a requirement reiterated by Mayor (Hutton, 16 March 2012; Hutton, 18 June 2012). Star Phoenix columnist Jordan Cooper supported the plan, arguing that increased transit ridership would reduce the City’s road maintenance costs, but also warned that council had a history of approving transit redesigns and then failing to invest in implementation (Cooper, 16 April 2012; Cooper, 13 August 2012).

6.4 An ACF Discussion of Events Involving Public Transit in Saskatoon

As with the ACF-based discussion of events around curbside recycling, we will divide actors into opposing coalitional camps in this section. As in that discussion, borders between camps become clearer later in the study period, again suggesting that we are witnessing the development of nascent coalitions rather than the activities of mature coalitions. Here we will discuss a pro-status quo group, and an anti-status quo group. In the former, we can include:

- Mayor Don Atchison
- Councillors Myles Heidt and Glen Penner
- Terry Scadden, director of Saskatoon’s downtown business association
- Mitch Riabko, manager of Saskatoon Transit
The first noteworthy belief expressed by Mayor Atchison was about the public subsidy directed to Saskatoon Transit. In the Mayor’s words, "I would prefer for us to try something different that perhaps won't cost us more" (Nickel, 10 January 2003), a position reiterated in various phrases over the study period (Nickel, 30 October 2003; Coolican, 5 November 2005; Coolican, 16 November 2005; Klein, 5 December 2007). Atchison used this belief to justify various decisions, such as the 2004 fare increase; "If you look at what it costs to operate a vehicle, transit is still the best deal in town" (Nickel, 23 November 2004). Atchison’s belief that even with fare increases, Saskatoon Transit provided better value than owning a private vehicle was reiterated following the 2007 hike (Nickel, 20 May 2008).

This belief was shared by several of his colleagues, including Counsellor Tiffany Paulson (French, 14 February 2005; Coolican, 5 November 2005), who at the same time serves as a good example of the somewhat conflicted thinking on transit of some members of the pro-status quo coalition. For example, Paulsen supported purchasing diesel-electric hybrid buses – equipment which came at a price premium compared to standard buses – to reduce corporate GHG emissions, while also requesting that administration produce a report on the level of public subsidy directed toward the private auto (Coolican, 6 September 2006; Klein, 19 December 2007).

Transit manager Mitch Riabko expressed a belief that the city needed to raise fares to control the number of public dollars sent to Saskatoon Transit during the 2009 and 2011 fare hike debates, and built fare hikes into his system redesign proposals year (Hutton, 7 November 2009; Warren, 27 May 2011). The Mayor and several councillors echoed Riabko’s belief, arguing that raising fares was necessary to avoid increases in property takes (Hutton, 17 November 2009; Hutton, 8 December 2011). These comments can be understood as secondary beliefs, since they are about instrument settings rather than options between instruments, but they also suggest policy core preferences regarding the primary obligations of the city. Public transit is a necessary function, but keeping property taxes low is a more important responsibility. It’s also notable that the public money budge for transit was referred to as a
‘subsidy’ by these actors, implying that the dollars spent on Saskatoon Transit were a courtesy to users rather than an obligation of the City, or an investment which would pay dividends.

Atchison also consistently expressed beliefs related to expanding the infrastructure and amenities available to personal automobiles, sometimes at the expense of withdrawing investment from alternative transportation infrastructure (Nickel 11 February 2009; Hutton, 25 February 2009; Atchison et al., 12 March 2009; Hutton, 16 December 2010; Hutton, 30 December 2010). Mayor Atchison also promoted the development of a special long-term maintenance fund for Saskatoon’s roads – understandable as an expression of both a policy core and secondary belief, in that it is both an approach and an instrument setting – during and after the 2012 municipal election (Hutton, 15 June 2012; Hamilton, 6 December 2012). From the Mayor’s perspective, investments in alternative modes of transportation were only justifiable when they would increase population density, especially in the downtown core (Atchison et al., 12 March 2009; Hamilton & Hutton, 24 September 2012; S-P Editorial Board, 19 October 2012). Here we see several layers of belief at work simultaneously, regarding the legitimate objectives of local government – increase Saskatoon’s population growth – and policy preferences related to achieving those objectives – expand the city’s system of roadways and parking.

Mayor Atchison enjoyed some support in the form of soft coordination from Terry Scadden, director of the downtown business association, who argued that as "the personal vehicle doesn't seem to be waning as a way of getting around," the City was correct to continue to direct the bulk of transportation funding to the needs of the auto (Hutton, 25 February 2009; Nickel, 11 February 2009; Nickel, 7 February 2009). Councillor Glen Penner also engaged in soft coordination with the Mayor, arguing that expanding the City’s network of roadways would relieve congestion issues by creating more space for motorists (Hutton, 19 September 2009), which Councillor Myles Heidt argued that council had no obligation to provide transit services to all of Saskatoon, claiming that "if you want good bus service buy a house on a bus route…you can't expect a bus to come" (Hutton, 8 December
2011). As with the Mayor, the beliefs shared here express a set of ideas regarding the legitimate 
obligations and activities of local government, as well as a model of what the city ought to look like in 
a physical sense. Under this shared model of urban design, securing transportation is left up to the 
individual, and the primary users of transportation infrastructure are individual motorists. These beliefs 
have obvious consequences for policy preferences.

Before closing out our discussion of the pro-status quo coalition, one event relevant to an ACF 
understanding of policy making in Saskatoon ought to be highlighted and interpreted. Leading up to the 
2006 transit system redesign, city administrators released the results of a survey which found that 71% 
of residents had not used transit in the last three months, approximately half of these would not change 
their behaviour regardless of modifications made to transit, and that less than half of all respondents 
would support taxation-funded improvements to transit service (Coolican, 23 June 2006). These results 
are one of the few examples we have of public opinion regarding transit, and they suggest one of the 
relatively stable parameters worked under by transit system administrators, elected officials and 
external advocates. With no broad constituency agitating for change or offering electoral support to 
candidates for office who worked to improve transit, it is little wonder that the pro-status quo 
coalition's policy preferences were more routinely realized in local government action. This said, it is 
also interesting that these numbers – or a more general claim to represent the public will – were not 
relied upon by members of that coalition as a resource to achieve those preferences. This can be 
interpreted in two ways: either the pro-status quo coalition was so secure in its control over policy that 
efforts at employing resources to affect policy were unnecessary, or; pro-status quo coalition members 
did believe that some improvements to transit services were required, and that public sentiments were 
off-base with this requirement and thus ought to not be relied upon as a guide to decision making.

In the anti-status quo camp, we can count:

- Councillors Lenore Swystun and Charlie Clark
Councillor Lenore Swystun believed Saskatoon was, by design, overly reliant on the personal vehicle, and that local government needed to take steps to shift this situation.

"It's time to start to get out of your car and take a look around and hop on a bike. We have to make it possible by providing the infrastructure. I think it's as important an infrastructure as providing the bridges." (McNaim, 15 August 2002)

Swystun operationalized this belief and promoted measures such as widening streets and erecting signage in order to encourage safe commuter cycling, proposals which enjoyed wide public support according to the Star-Phoenix (Parker, 4 November 2002; S-P Editorial Board, 13 November 2002). Swystun also engaged in soft coordination the following year when she spoke in favour of a plan by a local cyclists organization, Saskatoon Bikes, to start a bike-share program in the city (Polkinghome, 22 February 2003). Councillor Clark expressed similar beliefs when he joined council in 2006 identifying the construction of alternative transportation infrastructure as a high personal priority in his campaign that year (S-P Staff, 23 October 2006). Clark was also a proponent of the idea that the city needed to broaden the range of people who used city transit services (French, 19 February 2008; Nickel, 17 July 2008), and that the existing level of investment in cycling infrastructure was "ridiculous in his day and age…We all know that with climate change and obesity and all these things, cities of the future need to be bike-friendly…if we can spend $300 million building [the south bridge], we can find $3 million to complete a bike plan" (Nickel, 14 June 2008). This quote - and Clark’s sustained commitment to this combination of problem framing and solution identification - illustrates several policy core beliefs related to the legitimate policy responsibilities of the city, the relative
importance of those responsibilities, and the appropriate responses to these policy challenges Nickel, 11 February 2009; Hutton, 6 June 2009; Warren, 15 July 2009).

The Star-Phoenix's editorial board and civic affairs columnist Gerry Klein directly and consistently challenged the pro-status quo belief that funding directed to transit was a ‘subsidy’. For example, the board argued raising fares put the city at cross purposes with its own efforts to grow ridership and reduce emissions – as they pledged to do in 2003 when council voted to join the Federation of Canadian Municipalities’ Partners in Climate Protection program – and that choosing to not make significant investments in alternative transportation would lead to a future of traffic congestion and poor air quality (S-P Editorial Board, 9 September 2006; S-P Editorial Board, 30 November 2007; Klein, 5 December 2007). Gerry Klein promoted many of the same beliefs and solutions in his columns, arguing that the "tremendous" decline in transit ridership was a condition "for which we all pay, either in higher tax rates as we struggle to build and maintain the roads and bridges required to carry all these extra people [in private automobiles], or in frustration, gridlock and damaged air quality" (2 November 2005). Klein proposed increasing public funding for cycling infrastructure as a means to reduce the burden of use placed on Saskatoon’s roads, an example of both a policy core belief and an instance of soft coordination with Swystun and Clark (31 July 2008). Klein also engaged in soft coordination with these councillors when he shared his belief that Saskatoon's development ought to be directed such that, over the long term, the dominance of the personal automobile was eroded in favour of increased transit ridership (19 December 2007; 31 July 2008). This belief was shared by transit manager Jeff Balon, who argued the reason his department continued to run under-used routes in new neighbourhoods was to build a habit of ridership, to "get people accustomed to using the bus instead of driving their cars" (20 May 2008).

Finally, city manager Murray Totland’s support for a dramatic redesign of the city’s transit system was based on various policy-relevant beliefs. First, the plan’s overarching theme involved
Saskatoon becoming a “little more people-oriented and little less car-oriented,” a clear example of a policy core belief (Hutton, 25 January 2012; Hutton, 27 October 2012). Totland pressed council to set targets on transit ridership and modal share, another example of a policy core belief but also, potentially, of a deep core belief about the city’s authority to coerce behavioural change, particularly when read in conjunction with Totland’s comments on the need for the redesign process to place transit “on fair and equal footing with the private auto” (Hutton, 16 March 2012; Hutton, 18 June 2012).

Totland also expressed a secondary belief that placed him in the anti-status quo camp by bringing back bus rapid transit (BRT) as a preferred mode of operation for Saskatoon Transit, suggesting that it was the most cost-effective option for a city of Saskatoon’s size (Hutton, 15 March 2012; Hutton, 16 March 2012).

7. Informant Interviews in Saskatoon

Approximately one dozen interviews with Saskatoon-based policy actors were conducted over the spring and summer of 2014, the intention being to generate a second source of data with which the existence of sustainability-focused advocacy coalitions could be determined. Many potential participants were identified during analysis of the collected newspaper clippings, while others were referred by the initial interviewees. As Saskatoon is a relatively small city, participants are identified as generically as possible to meet the promises of anonymity made to each respondent.

In addition to relying on the interviews to identify the existence and boundaries of a sustainability advocacy coalition, the data collected in this phase also helps to determine how well the strong/weak sustainability dichotomy captures how policy actors understand the concept and practice of urban sustainability. Unlike other code-based qualitative research projects, this one is based on a pre-established codebook, one containing eight labels divided into two higher-order categories. The
definitional elements of strong and weak sustainability also serve as the values and beliefs focused on by the Advocacy Coalition Framework, meaning that the methodology is designed to serve multiple analytical ends.

Interviews were semi-structured, and respondents were asked three broad collections of questions:

- what does urban sustainability mean?
- how does policy change occur in Saskatoon?
- what is your role in the policy process?

This section mirrors the interview structure, with each collection of questions discussed in turn and with a focus on strong and weak sustainability beliefs, as well as the frequency and quality of collaborative relationships between policy actors. By the close of this discussion, I will arrive at two conclusions. First, an ACF-based understanding of policy making in Saskatoon is of limited valued, owing to the non-technical understanding participants have of urban sustainability, the low level of coordination between actors, and a cultural aversion to clear conflicts over policy which make identifying boundaries between competing coalitions difficult. Second, that the strong/weak sustainability dichotomy does not serve as an appropriate conceptual framework with which positions on urban sustainability can be understood, a claim which will be justified by reference to the very uneven appearance of many of the elements of each perspective.

7.1 The Meanings of Sustainability in Saskatoon

Questions asked during this portion of the interviews focused on exploring personal understandings of urban sustainability, what actions had to be taken if it were to be achieved, who the beneficiaries were, how success could be measured, and the degree to which its implementation was a
paradigm shift in the behaviour of local government. The eight codes, split under the heading of strong and weak sustainability, will be discussed in oppositional pairs: ecocentric vs. anthropocentric valuations of nature; absolute vs. temporary limits to growth; substitutability vs. non-substitutability of resources, and; behavioural vs. technological solutions.

7.1.1 Ecocentric vs. Anthropocentric Valuations of Nature

As a brief refresher, applying the ecocentric code required that the respondent assign, suggest, or imply that non-human life possess value in its own right and is not contingent upon its use value to humans. Applying the anthropocentric code meant that the respondent believed non-human life had value, but only expressed that value in terms of the benefit which non-human life could provide humans.

The ecocentric perspective was a minority one among respondents, with only three making statements which could be categorized under this code (SR7, 23 April 2014; SR4, 8 May 2014; SR3, 5 May 2015). A common thread linking these three respondents was a belief that non-human life could serve as the basis for the production of new, pro-sustainability value systems, paradigms which could replace an unsustainable status quo of production and development. According to Saskatoon Respondent (SR) 3, the benefit of pursuing urban sustainability lay in its potential as a platform for critique of that status quo, for asking "what are we here for, what is life all about, is it just an economic pursuit, or is it something more profound than that" (5 May 2015). SR7 believed that by becoming "more integrated with the natural systems that we live around…the more we become conscious of all these [natural systems], the more grounded people feel and the more meaning people feel," echoing SR3’s emphasis on non-human life as an intellectual foundation for a new developmental paradigm (23 April 2014).
Proponents of the ecocentric perspective also actively constructed a model of the unsustainable paradigm they were looking to replace with one built on principles found in non-human life. The status quo model is one of "rampant growth," growth of road systems, greenfield development, and personal automobile use as embodied by "car culture" and its requisite infrastructure (SR4, 8 May 2014). The car as a symbol of this problematic paradigm was also promoted by SR3, who argued that abandoning the personal auto in favour of a more sustainable model of transportation would result in improvements to health and community cultural diversity (5 May 2015).

Consumerism was a second characteristic of the unsustainable development paradigm opposed by proponents of the ecocentric ethic perspective, with SR3 opining that Saskatoon residents carried a high burden of responsibility for the shift to sustainability, given their historically high consumption levels, and also shared a belief that "we've developed a kind of world view where those values, those kind of commercial values are the most important in practice…in practice how much of your life is devoted to wanting things" (5 May 2015). SR7 warned of a "real dilemma" between the reliance of Canada's economy on consumer spending and a precondition of urban sustainability that "we reorient our priorities as human beings and actually decide that just acquiring stuff is not the way towards happiness" (23 April 2014).

The anthropocentric code appeared more frequently across the interviews, with six of eleven respondents establishing such positions on urban sustainability. A common element across many of these statements were beliefs regarding the positive economic potential of sustainability-driven policy changes. Such initiatives were expected to lower infrastructure maintenance costs and defer capital expenses by extending the service life of existing facilities, such as landfills and water treatment plants (SR1, SR5, SR6). Additional benefits included improvements to the local quality of life, a good stressed by many interviewees as a primary concern of Saskatoon's government and described as an element "that retains and attracts people" (SR10), something which could be quantified and tracked as
an indicator value over time (SR11), and was embodied by the leisure centres, pools, and parks provided by the city, all infrastructure which was provisioned without an economic logic but still fit within the corporation's mission (SR1). The implication behind these comments is that these respondents did not understanding urban sustainability as an object in-and-of-itself, but as symbolically represented by and embedded within other objects.

Another interesting commonality across the respondents catalogued under this code was how consistently they made statements avowing that while they valued the natural world, their interest in urban sustainability was not motivated by a desire to protect that world. SR6 summed this theme up quite well while explaining why they chose to cycle to work every day:

"...I like to do things that are good for the environment, but it's not what propels me to do it...And that doesn't say I'm not concerned about the environment, I am" (22 April 2014).

Other respondents made similar statements in the context of explaining who benefits from urban sustainability ("…nature, or Earth, but really it's citizens who benefit…” (SR1, 1 May 2014)), or while highlighting the economic cost of environmental initiatives and suggesting they need to pay for themselves (SR5), or, in the case of SR9, while noting a precondition of public acceptance of policy change for sustainability:

"...it's going to be the economics that will change behaviour, not everyone's going to wake up tomorrow and go ah ha I want to save the planet, and become an environmentalist, but I think once their behaviour, or the true cost of their behaviours are put on their wallet...I think they'll change their behaviour."
Avoiding the label of 'environmentalist' was an objective of these respondents, a sufficiently important one to warrant express declarations of non-identification, and reinforces the justification for applying the anthropocentric code to their responses.

7.1.2 Absolute vs. Temporary Limits to Growth

This pairing of opposed strong and weak sustainability codes was considerably more active than the split discussed above, with six interviewees promoting a belief in firm limits to growth while four believed in the temporary nature of those limits. The commonalities across each collection of interviews will be discussed in turn.

To begin, adherents of the firm limits perspective based their belief on a criticism of consumer society, in their view a core characteristic of the unsustainable status quo. SR1 wanted to see urban sustainability engaged in the construction of a "community that continues to draw on its own resources over and over again from a reduce, reuse, recycle perspective, so we are not constant consumers," while SR3 argued that the consumer society's huge resource draw placed a higher responsibility on Saskatoon residents to begin a transition towards sustainability (1 May 2015; 5 May 2015). SR7 warned that "we need to be conscious of our limits as human beings in terms of how we can live in a way that doesn't take more resources to support us than what's available," though this respondent was not specific regarding which resources were limited, or the basis of those limits (23 April 2014).

In fact, only two of the six interviewees to promote a firm limits perspective were clear on which natural resources were limited. Both SR8 and SR11 argued that policy ought to be implemented which set a ceiling on Saskatoon's population and geographic size, with SR8 expressly concerned that the city may exceed local carrying capacity if this were not done (25 April 2014; 10 June 2014). However, neither participant clearly identified the natural limits to growth which were at risk of being
broken by the present development paradigm through reference to particular indicators or sources of data; the sense that limits existed was expressed in entirely qualitative language, and, when pressed, could not be stated in more quantitative terms. The latter point also holds for the other four interviews in this set, none of whom expressed confidence in their quantitative understanding of the state of sustainability in Saskatoon (SR 1, 1 May 2014; SR3, 5 May 2014; SR4, 8 May 2014; SR7, 23 April 2014).

Reading into other comments made by this collection of respondents may provide some guidance to the natural resources presumed to be limited, in particular those comments which placed an emphasis on developing local resources to improve urban sustainability. SR1 discussed the need for municipal recycling and composting programs, but also argued that the products produced in the course of collection could be used to replace goods brought in from outside Saskatoon, such as materials used in road repairs and maintenance of city grounds (1 May 2014). SR3 and SR7 both claimed that energy production could be shifted from a centralized system of fossil fuel production to a decentralized system built around renewables like solar and wind power (2 May 2014; 23 April 2014). These comments imply a concern that natural systems involved with the breakdown of wastes, as well as the atmosphere's ability to absorb anthropogenically-produced gases, are among those which set a limit to the city's growth, but again, these comments are qualitative in nature and were not made in reference to any data-based understanding of the problem.

One respondent who expressed beliefs consistent with a limits perspective did suggest that the primary check on the city's growth was financial, rather than attributable to an ecological boundary. SR4 warned that Saskatoon "cannot afford to keep building roads and bridges to accommodate our road culture, our car culture," providing an example of this observation while simultaneously holding up the car as a totem of unsustainable behaviour, a belief expressed by many respondents which will be revisited below. As a final note, this is also an example of a respondent expressing an affinity for one
higher-order approach to sustainability while using justifications which suggest a preference of the opposing higher-order approach, a contradiction which appeared with unexpected frequency and one that will also be discussed further.

The temporary limits to growth code catalogues instances of interviewees making claims that checks on Saskatoon's growth - whether in population, geography, or economic activity - exist only because of deficiencies in human institutions, rather than firm natural boundaries. If those deficiencies are corrected, growth will continue, but this correction will not happen automatically. The most exciting common theme spotted across the four respondents captured under this code spoke to this point directly, and involved the construction of a complete causal story regarding what limits Saskatoon's growth, how that limit could be overcome, and why doing so is difficult.

While the status quo development paradigm is unsustainable to these respondents, the root of that unsustainability is financial rather than environmental. The costs of maintaining the roads, sewers, and water lines of far-flung suburban neighbourhoods will cripple Saskatoon in the long run, justifying a change in development logics (SR5; SR6). Paying these rising costs with existing funds is not an option, as the city's revenue stream is already too heavily reliant on property taxes and cannot be easily deepened. Possibilities exist for diversifying the city's revenue base - possibly by moving to user-pay garbage collection and instituting road tolls - but these changes would take time that the corporation does not have and, in the case of proposals such as a municipal sales tax, legislative authority that Saskatoon's local government does not have (SR5, SR10).

Efforts can be made to control the costs side of the ledger by requiring increased housing density in new neighbourhoods and incentivising infill, but these changes butt up against citizen expectations of what life in Saskatoon ought to be like (SR6, SR9). These expectations can be shifted through education and marketing campaigns which explain why change is necessary, but the success of these initiatives are limited for two reasons. First, the status quo is both comfortable and attractive,
meaning that people already in Saskatoon know how to live under it, and people outside Saskatoon move here to experience this way of living (SR6, SR9). Second, the changes which are required impose costs up-front while the benefits are back-loaded, and some of the costs involve permanently losing some of the desired features of the status quo, such as unlimited personal mobility (SR5, SR6, SR9, SR10).

Education cannot convince people to forgo their immediate self-interest – which is well-served by the convenient and familiar status quo – in the name of eventual environmental improvement, which means that serious policy change will not occur until individuals can no longer ignore the economic costs of the existing paradigm. Only when congestion is extreme, when infrastructure maintenance costs demand successive double-digit property tax increases, will Saskatoon residents back action on urban sustainability to a significant degree (SR6, SR9). Proactive change can be taken by the local government, but these actions are in spite of public belief, not attributable to it, and are intended to ensure that the city's incoming population and future generations enjoy the same quality of life experienced by today's residents (SR5, SR6, SR10).

7.1.3 Non-Substitutability vs. Substitutability of Resources

Respondents in Saskatoon offered almost no comments on whether or not natural goods and services could be replaced with human-developed equivalents, with the pro-substitutability code appearing not at all and the anti-substitutability code only twice.

SR10 spoke only about arable land, and how once it was lost to development it could not be replaced as justification for its protection. As was noted above, however, this respondent also identified a belief in the temporary nature of limits to Saskatoon's growth, specifically by suggesting that the city grow up rather than out in order to stop losing arable land while also ensuring continued population
growth. Again, this provides an example of an interviewee promoting a conceptually contradictory understanding of sustainability, in this case by offering a weak sustainability solution to a hard sustainability problem (SR10).

SR8’s comments on the non-substitutability of natural resources were less challenging to the framework. To this respondent, goods like fresh water, arable land, fuels, and clean air could only be provided by natural processes, and thus their use, depletion, and/or pollution ought to be tightly regulated through policy. As was noted above, SR8 recommended that a precise and empirically-based definition of sustainable use be established for these environmental goods, and those limits used to set rules on how many people could live in Saskatoon, a kind of urban growth boundary set on population rather than geography (SR8).

The fact that these two codes appeared so rarely in the comments of actual sustainability practitioners requires some consideration. What does it mean that interviewees spoke so little about this element of both strong and weak understandings of sustainability? For one, it suggests that academic definitions of sustainability are conceptually distant from policy practice, to the point where policy actors and scholars are not engaged in a meaningful dialogue on sustainability. The substitutability division may only exist in policy practice if a certain outlook on natural resources and systems is brought to those activities, an outlook which both perceives those systems and takes a position on whether or not they can be manipulated, possibly through geoengineering. Many respondents implied they recognized the existence of natural systems (hydrological, atmospheric, etc.), but nearly none expressed the second element, a belief that these systems can or cannot be directly manipulated by humans. The implication, then, is that academic debates on the risks, possibilities, and ethics of geoengineering have not been incorporated into the perceptual lens of policy actors in Saskatoon, making the application of this code pair fruitless within this particular context.
7.1.4 Behavioral vs. Technological Solutions

A belief that changes in behaviour are key to achieving urban sustainability was shared by many Saskatoon respondents, with nine of eleven interviewees espousing such perspectives. While accounts of which behaviours needed to change were largely similar across participants, positions on how local government could use policy to spur those changes, and the casual logics used to justify why behaviour was more critical to sustainability than technological change, varied more widely.

Beginning with the commonalities, many interview participants focused on the need to change habits of transportation and housing choice in order to ensure a sustainable future for Saskatoon. Many expressed opinions on how public transit could be improved to this end, such as SR1, who promoted a coverage model of transit service - where every household in the city receives service at least every thirty minutes - as one possible solution (SR1). SR2 similarly promoted transit system changes as a mechanism to spark behaviour change, but suggested that the changes required had less to do with service styles and more to do with popular perception of the service itself, with citizens believing "it's the loser cruiser…[and] it's unsafe" (SR2). One notably complete example of a policy change focused on encouraging more sustainable behaviours was provided by SR8, who described how construction companies with projects in Saskatoon could be made to pay refundable levies prior to beginning construction or demolition, bonds which would be repaid depending on the ratio of construction waste recycled to landfilled (SR8).

This suggested policy change bridges into the next theme present within this collection of interviews, namely a disagreement over how coercive the city government can be in encouraging behavioural change. On one side are respondents like SR1, who promoted direct regulation of unsustainable behaviours such as landfilling waste. SR1 wanted to see specific materials banned from the landfill once municipal recycling programs were operational city-wide, and beyond this argued that "the city should be creating…policies that will, you know, penalize excessive consumerism" (SR1).
SR8 supported a similar, direct approach, and suggested that "by changing the structure of how things work," Saskatoon's government could increase the cost of unsustainable behaviours (SR8). SR2 expanded on this emphasis on choice architecture as a mechanism of encouraging behavioural change by suggesting Saskatoon's citizens could be divided into three broad camps: those who act sustainably for their own reasons; those who do so if incentivized; and those who will resist changing their behaviour. Implementing penalties on unsustainable behaviour would shift the second group's behaviour, while the third might only be moved by raising penalties to extraordinary levels, meaning that Saskatoon's citizenry is not a homogenous target audience when it comes to sustainability policy (SR2). SR4 and SR9 justified their support for directly penalizing unsustainable behaviour in similar language by arguing that residents had no idea how current unsustainable patterns of land use and development were subsidized, in that inherent externalities were not included in infrastructure costs or property costs, and suggesting that penalties should be used to shift behaviour so that "the right action [becomes] the default" (SR4; SR9).

Several other respondents in this pool of behaviour-focused interviewees were less willing to use the coercive power of local government to require behavioural change. For example, SR7 believed that while behaviour - specifically, consumer habits and materialistic belief systems - needed to change in order for urban sustainability to be achieved in Saskatoon, they did not agree that local government was the order of government best suited to impose penalties on unsustainable behaviours. This participant wanted to see provincial authorities take the lead on regulation, specifically by imposing costs on companies for the packaging used by their products (SR7). SR10 warned against imposing penalties on unsustainable behaviour prior to an extended period of public education, suggesting that a hypothetical ban on organics in the residential waste stream might actually slow the implementation of urban sustainability (SR10). SR11, while still a believer in behavioural change as the prime determinant of urban sustainability, warned that Saskatoon's government relied too heavily on the
revenue generated through resource consumption to begin imposing penalties on their excessive use (SR11).

Another point of difference within the collection of interviewees who emphasized behaviour over technology had to do with the causal chain they constructed which would result in such chain. The majority view held that behaviour was primarily driven by rational calculations of self-interest and the convenience of various options in regards to goods and services like housing or transportation. Shift the calculation, shift the behaviour. SR11 espoused this perspective by sharing that they did not believe that anyone set out to intentionally behave unsustainably on a day-to-day basis, but rather that individuals aim to "conveniently and affordably and without a lot of puzzlement on their part" obtain the necessities of life (SR11). SR9 shared this focus on convenience and affordability while simultaneously dismissing the role of values in shifting behaviour, as did SR1 when they argued that "if it's not convenient, [change is not] gonna happen...people may have the best intentions in the world but...they're not gonna change their behaviour or their patterns, it's got to be extraordinarily convenient" (SR1; SR9).

A minority view on the foundations of behaviour was built around a belief that values and world-views determined how people choose to live, and accordingly it is these preconditions which needed to shift before behavioural change could be achieved. SR3 and SR7 were the only respondents to suggest such a causal relationship, with SR7 suggesting that local government could spur the development of world views more amicable to urban sustainability by redesigning local policy making processes to be more participatory and rely on citizens to help the city define its own sustainability objectives (SR3; SR7).

Only two respondents emphasized technological change over behavioural as the primary precondition of urban sustainability, and one of these offered sufficiently mixed messages so as to be catalogued under both of these codes. SR7, as noted above, suggested that behaviour was vital to
achieving sustainability, but was skeptical as to local government's capacity to shift it, suggesting that the provincial order of government was better positioned to regulate unsustainable consumer choices. Technology, on the other hand, could be purchased and installed "in spite of the community in some ways," meaning that citizen disinterest would not be an impediment to implementing urban sustainability (SR7).

SR6 justified their belief in the supremacy of technology on similar grounds, arguing that sustainability would be impossible for as long as working towards it meant "surrender[ing] so many of the things we have some to cherish," such as convenient transportation and climate controlled buildings. In addition, many existing technologies which could improve Saskatoon's sustainability were inappropriate for the city's current size and severity of issues, meaning that the city's problems with congestion, with sprawl, would need to grow worse before they would be seriously addressed (SR6).

7.2 The Creation of Policy in Saskatoon

The second set of questions posed to participants focused on their understanding of the local policy process, and how groups or individuals interested in sparking policy change ought to act in order to succeed. The prospective advocates in these questions included hypothetical policy outsiders, specific sustainability-focused organizations active in Saskatoon, and the participants themselves. The purpose in doing so was to get an outline of how policy actors coordinate with one another in Saskatoon, coordination being the second characteristic of a policy coalition. To the extent that respondents provided a clear outline of regular coordination between actors, arguing for the existence of an advocacy coalition focused on urban sustainability would be possible.

One co-benefit of this line of questioning, which emerged only upon reflecting on the whole collection of interviews, was the revelation of personal models of the policy process, abstract
frameworks of greater or lesser sophistication which the participants built to structure and guide their own actions. A second, and expected, co-benefit of this line of questioning was further development of the participants’ policy narratives, the stories they told about urban sustainability, how it would be achieved and what – or who – stood in its way.

Overall, while the interview participants provide a rich and relatively consistent understanding of how policy change comes about in Saskatoon – including inventorying the resources most valuable in achieving change, the purpose in approaching different actors in the policy process, and identifying the norms and standards to be maintained while advocating for change – they did not provide sufficiently clear or strong examples of coordination between actors in order to justify a claim that sustainability-focused advocacy coalitions exist in Saskatoon. At best, the type of coordination identified by participants was of the soft variety, or instances of shared language across policy actors which occur without the sharing of resources or joint strategizing in the pursuit of policy change.

If a sustainability-minded advocacy coalition does exist in Saskatoon, it is a nascent rather than mature collective, a situation potentially explicable in three ways. First, there exists no umbrella organization or meeting forum actively working to bring like-minded groups together on urban sustainability. Several respondents suggested that the dissolution of Road Map Saskatoon in the later part of the study period was a detriment to the promotion and implementation of sustainability in the city, while others claimed that the corporation’s inability to routinely engage outside organizations meant that new ideas on sustainability were introduced to government only rarely, reinforcing the status quo bias in policy practice. If such an organization or forum existed, shared definitions, measurements, and baseline facts could be developed and agreed upon, elements which ACF argues grease the rails of policy development by allowing coalition members to move beyond abstract questions to applied ones.
Second, the existing organizations outside government who promote urban sustainability lack the resources, inclination, or both, to coordinate their activities in more formal and routine fashion. Road Map Saskatoon served this function until it went inactive, and its constituent civil society members have not made efforts to resurrect or succeed it with another umbrella organization. While this broad forum did count municipal representatives and business interests among its membership, neither of those actor groups have the same sort of sustained interest in sustainability-focused policy change that NGOs can organize around, implying that it will be these NGOs who take primary responsibility for sparking the creation of such a forum. If they fail to do so, the development of a complete advocacy coalition – featuring instances of strong coordination as well as shared beliefs across members – will be inhibited.

Third, many respondents spoke of the municipal policy process as being uncomfortable with conflict or confrontation, to the point where actors who advocated for change in an accusatory voice were deliberately marginalized by both policy insiders (administrators and councillors) and outsiders (organizations, journalists, and individual advocates). However, it is precisely this conflict which tells both the analyst where coalitional boundaries are, and coalition members who their friends and enemies are. If the culture of the political system is such that confrontation is avoided by all would-be agents of change – regardless of their policy preferences, but as a norm of policy practice – then these lines between coalitions will never emerge, and the concept itself becomes an unhelpful tool in understanding municipal policy making.

The remainder of this section is organized as follows. First, we cover the instances of coordination shared by participants, both hard and soft, as well as their thoughts on why coordination between policy insiders and outsiders ought to be routinized. Second, the resources identified by respondents as most helpful in achieving policy change in Saskatoon are named.
7.2.1 Coordination in Saskatoon

As stated above, interview participants were far more likely to identify instances of soft coordination between actors than hard coordination. For instance, SR6 claimed that politicians were adopting the language used by outside groups like the Saskatchewan Environmental Society on sustainability in order to demonstrate their commitment to action on the issue, and also suggested that natural turnover in the administration was ensuring that bureaucrats who used such language would increasingly be found in senior positions (SR6). This latter view, that turnover would increase the civic administration’s commitment to sustainability, was also shared by current and past members of that class (SR10; SR11; SR2).

Members of civil society organizations involved in promoting urban sustainability had similar things to say regarding their experiences coordinating with other, like-minded groups. SR8 revealed that their organization only reached out to others on a sporadic and reactionary basis, and did not regularly include other groups in their campaign planning or execution (SR8). SR9 shared that while many senior organizers in Saskatoon’s NGO sector were involved with multiple groups simultaneously, they did not believe that this organizational-overlap led to coordinated activities or advocacy strategies (SR9). SR3 had a slightly different perspective, suggesting that certain organizers were particularly adept at bringing actors together over issues in order to coordinate actions and achieve change, but that this trait was not a universal one, and that organizations who lacked members with such skills did not count it as a deficit which needed to be filled; interestingly, SR3 was speaking specifically of SR4, highlighting the tight-knit nature of Saskatoon’s sustainability-focused civil society network (SR3).

Examples of hard coordination were present but rare, and could be divided into two groups. Hard coordination which occurred under the umbrella of Road Map Saskatoon, and hard coordination which was a consequence of local government striking service agreements with civil society
organizations. The former included initiatives like the Eco Village Development Corporation, which brought together local developers, financial institutions, administrators, councilors, and NGOs, and aimed to construct a sustainable residential and commercial development in downtown Saskatoon, a partnership which fell apart following the 2008 financial crisis (SR3; SR2). Road Map Saskatoon was also the forum in which the city’s greenhouse gas management plan was developed, an initiative which saw this umbrella organization incorporate in order to access funds provided by the Federation of Canadian Municipalities and have those funds matched by the local government; following this, representatives from civil society, administration, and council worked jointly on drafting an inventory of the City’s emissions. Road Map dissolved prior to the creation of a plan to reduce those emissions, partly due to the exit and non-replacement of several founding members (SR2; SR3; SR11).

The latter collection of hard coordination relationships includes only two parties, government and NGOs. The later would receive funds and a mandate from the corporation to deliver some service that, for whatever reason, the administration itself did not want to deliver. Examples provided by participants included the Saskatchewan Environmental Society’s delivery of pesticide reduction programs, and the Saskatchewan Waste Reduction Council’s educational programs on composting (SR11; SR2; SR8). Interestingly, several interviewees were disappointed with the programmatic focus of these relationships, suggesting that they were superficial relationships which were more about local government maintaining its status quo bias by managing the expectations of outsiders then generating new ways of developing policy outputs (SR11; SR2). SR11 suggested that the corporation was not “leveraging our community[‘s] passion and commitment for things…instead it’s just what do we think the [corporation] might buy, and that’s the kind of relationships we get” (SR11). Deeper relationships, and accordingly deeper instances of strong coordination, were an objective of other participants as well, with SR7 and SR11 both suggesting that greater cooperation between local government and outside organizations could result in more legitimate and ambitious policy outputs (SR7; SR11). Others were
skeptical of the possible benefits of hard coordination, sharing worries that doing so would compromise their own perceived independence and politicize their influence (SR1; SR6).

7.2.3 Resources in Saskatoon

It was striking how consistent interviewees were in highlighting which assets an advocate would find most useful in influencing policy change, a consistency which suggested a shared understanding of the policy system across actors, regardless of their proximity to the offices of formal decision making. The most widely discussed were technical reports, with SR2 calling such documents “the grease that keeps government working,” implying that the power of reports is at least partial based in their familiarity (SR2). SR11 suggested that “doing your homework” was represented by the quality of the reports you produced, and that advocates both in and outside of government who did theirs well were taken more seriously by decision makers, a claim echoed by policy outsider SR9, and deep insider SR5 (SR11; SR9; SR5).

The danger in not doing your homework lay in alienating your audience of decision makers, a risk exacerbated – according to SR10 – by a lack of time and resources to process information and assess the claims made by policy advocates. To SR10, the constraints on decision makers work to encourage them to quickly dismiss research which appears incomplete or overly biased, meaning the advocate relying on it to justify their claims would be making a wasted effort at policy influence (SR10). SR5 and SR1 echoed this claim, with SR1 using especially blunt language to condemn “ideas that [advocates] have not researched properly…that’s frustrating to me because there are a lot of demands on my time…sometimes [advocates] get so wrapped up in their own passion that they’re not really seeing things clearly” (SR1; SR5). Finally, SR9 held a minority but interesting perspective on the value of reports, arguing that formal research “doesn’t guarantee you anything, because it’ll always
come back that well this is Saskatoon and we’re different,” a somewhat cynical perspective shared by SR3 and SR7 (SR9; SR3; SR7).

While formal reports were the most commonly discussed type of resource employed in influencing policy, several participants expressed considerable disappointment in the quality of research relied on by civil society groups and other policy outsiders. SR5 explained that this meant decision makers were forced to “spend a lot of resources just trying to decipher what exactly is the issue or problem,” encouraging the kind of slow pace of policy change criticized by policy outsiders (SR5). SR1, SR2, and SR10 suggested that the most common type of evidence relied upon by policy outsiders included collections of personal anecdotes and documents developed for other cities, oftentimes cities many times larger than Saskatoon, information sources criticized by these participants for being unhelpful in defining Saskatoon’s problem or plausible solutions (SR1; SR2; SR10).

Another type of notably valuable resource was public support, or in ACF’s language a membership which can be mobilized in support of policy change. SR9 claimed that having a significant cadre of public supporters who were willing to take steps like sign petitions, pay a membership fee, appear in media stories, or contact their ward councillor made a significant difference in the reception that outside advocates would receive; SR6 made a similar claim when they suggested that civil society groups with a significant public following, as represented by members or social media followers, would receive more careful attention from decision makers (SR9; SR6). SR2 suggested that citizen support was tremendously valuable to policy advocates, claiming that “a regular citizen has more pull with council than the middle manager and below at the city” (SR2). SR11 also emphasized the role of public support as a powerful resource when attempting to influence policy, but warned that organizations which drew from only a limited segment of local society would not be as well-equipped to exert influence as a group with a broad membership (SR11). SR3 and SR4 suggested that a broad membership was a strength of groups like Road Map Saskatoon and the Eco Village Development
Corporation, while SR9 advised that “trying to frame your issue as something which is important to more than just a subset of people...[builds] the perception that you’re not just a fringe group” (SR9; SR3; SR4).

Money was mentioned as a resource far less frequently, but deserves to be discussed here because it highlights how limited the resources of local government are, and what kinds of levers can move them on policy. SR7 suggested that outside actors who possessed or could contribute some of the cash required for policy implementation would be more likely to have their initiatives supported by council and administration, partly because outside contributions lowered the cost of policy failure which would be carried by those decision makers (SR7). SR2, SR3, and SR4 all emphasized that Road Map Saskatoon’s ability to access external funding not available to the corporation was particularly helpful in encouraging them to engage with Road Map and agree to develop a greenhouse gas management plan (SR2; SR3; SR4). SR2 also shared a story of the single time they could recall that an outside advocate came to them with a proposal for policy change in the form of a complete business case, one which drew on existing municipal resources rather than requiring the allocation or raising of new revenue, and suggested that advocates who closely tailored their campaigns to the reality of local spending priorities would be more successful than other, less-focused campaigns (SR2). This resource may be the most difficult for policy outsiders to acquire, and is certainly one of the most rarely deployed in advocacy initiatives, but it may also be one of the most effective, given the limited pool of funding available to decision makers and its role in encouraging status quo policy making.
7.3 Sustainability Narratives in Saskatoon

In this section, competing narratives around sustainability will be pieced together based on the statements discussed in the events and interviews sections. Narrative gaps, as understood by Roe, are a kind of unrecognized barrier to policy change which can be identified by the policy analyst and focused on by policy advocates working to achieve issue closure. In an issue space like sustainability, where the acceptability of any given solution is determined by value priorities and belief systems, assisting with the building of better stories may be of more practical value than more quantitatively-minded analysis.

7.3.1 Pro-Sustainability Heroes, Victims, and Villains in Saskatoon

Broadly speaking, this camp is made up of the actors who habitually advocated for expansions of solid waste and public transit programs, as well as those who self-identified more closely with the strong sustainability perspective. The narrative shared here is an amalgamation of their beliefs, values, and issue positions, and as such should not be understood as the outlook of any single actor. Coalitions are entities in-and-of themselves, and more than simply the sum of their parts. Rather, they are supra-organizations with their own policy preferences, and entities in which the constituent members are, to some degree, subsumed in favour of a collective.

The pro-sustainability coalition names two different categories of hero. Elected officials can be heroes, but only when they demonstrate leadership on sustainability by not waiting for public opinion to make acting safe (in an electoral sense). These councillors are to some extent self-sacrificing, because they deliberately open themselves to criticism by agitating for the City to do more on sustainability, and to extend its programming activities beyond the historically-core services of the municipality. Though their advocacy may be initially unpopular, these councillors become heroes to the pro-sustainability coalition by remaining committed to making decisions which are beneficial to
future generations, such as working to increase investment in alternative transportation and re-orienting the city towards more compact and walkable design.

The second category of hero are residents who participate in pro-sustainability programs and demonstrate pro-sustainability behaviours. Critically, what identifies a heroic citizen from a mundane one is that their participation comes in advance of changes which make participation the default choice; the citizen who did not start recycling until the implementation of curbside service is not a hero, while the citizen who used the recycling depot system was a hero.

The pro-sustainability coalition narrative has a more detailed understanding of its villains. At the top of the list are Saskatoon residents, who qualify as villains for several reasons. First, because their habits of consumption are incompatible with environmental sustainability. As their appetite for resources is among the highest in the world, citizen behaviour at the heart of the sustainability challenge. Second, and more damaging, their unwillingness to pay the costs of building a sustainable society qualifies citizens as villains, both regarding the pricing-in of externalities and in terms of adopting more sustainable behaviours which are less convenient than the unsustainable equivalent. Related to this is the unwillingness of Saskatoon residents to be educated on the extent of the sustainability challenge. This intransigence is based on an assumed relationship between learning and change; if residents accepted lessons on the sustainability challenge, and their individual role in exacerbating it, they would necessarily be required to change their behaviour. To avoid losing the convenience of the unsustainable status-quo, they avoid and reject learning altogether.

The second villain is the City of Saskatoon itself, which is a villain in the pro-sustainability narrative because its reliance on revenue from unsustainable behaviours hinders its ability to shift to more sustainable habits. Specifically, the City’s role as a land developer means it is strongly incentivized to continue existing patterns of urban growth. A move to denser forms of new development, complemented by infill of existing neighbourhoods, would reduce a large stream of own-
source revenue, forcing the City to rely even more on property taxes and, potentially, introduce entirely new forms of revenue generation. Rather than commit to making the changes required to develop a more sustainable Saskatoon, the City stresses the need for ‘balance’ in implementing changes as cover for remaining on largely the same course of development as always.

In keeping with the established trend, the victims in the pro-sustainability narrative are Saskatoon residents and the municipal government. Locals are victims on two counts. First, because it is ultimately they and their descendants who will experience the negative consequences of the unsustainable behaviours indulged in today. The City is also a victim in this sense, as it is the entity which will carry the financial responsibility of maintaining the sprawling infrastructure developed under the unsustainable status quo. Second, current citizens live in a city designed around meeting the needs of cars, not people, and consequently live in communities which are not as walkable, diverse, and pollution-free as they could be under a different, more sustainable, paradigm.

The pro-sustainability narrative identifies a third victim, though not as frequently as the preceding two. Following Roe, naming minority actors and narrative threads is recommended as these elements may provide the foundation of new narratives. In this case, the victims are non-human species and the natural systems they inhabit, both of which suffer because of the unsustainable status-quo approach to city development. Species lose habitat, remaining habitat is of lower quality, and accordingly can support fewer species and individual members of species. These victims have no formal standing or representation in the political and policy processes which affect them. Therefore, not only are their interests damaged in the usual course of business, but they are not ever recognized as existing.
7.3.2 Pro-Sustainability Scenarios & Arguments in Saskatoon

Pro-sustainability actors supply multiple scenarios and arguments to legitimate their claims. This collection of stories can be split into two categories, based on their core topic: the root of the sustainability problem and its development over time, and; the barriers to action and how they will be overcome.

The first collection includes arguments holding that the current goals of individuals and governments are focused on economic growth and expansion of material consumption, ends which are incompatible with the development of the sustainable city. By finding new purposes in life – namely, ends focused on qualitative rather than quantitative growth – building the sustainable city will become possible. A related argument focuses on how endless growth hinges on both endless availability of resources and endless waste processing, requirements which a finite world cannot provide. Here, the position is that consumer society is inherently unsustainable because it relies on bringing in resources from outside its physical boundaries and consuming them in ever-increasing quantities; building a society which relies more on developing its own resources in a closed-loop of consumption would result a more sustainable configuration of consumption. Therefore, the policy fix involves setting limits on consumption, in Saskatoon’s case by establishing an urban growth boundary which will naturally constrain the city’s population.

A more historically-focused scenario claims that in Saskatoon’s early years, the city was compact, walkable, and had an extensive public transportation system. However, as the personal auto became more widely used, the city spread out and the quality of public transit deteriorated. Reversing this pattern and returning to the original city’s format requires redirecting transportation spending towards public transit and away from the needs of the private auto; this means building a faster, more reliable mass transit system whose improvements come at the expense of making private travel more costly and inconvenient. As with the story about consumption described above, the assumption in this
scenario is the City has been pushed into unsustainability by forces external to its own political, geographic, and economic boundaries. Sustainability is portrayed as a return to the local, rather than an innovation or evolution of present practice.

The second collection of scenarios and arguments are focused on the patterns of behaviour that sustain the sustainability problem, and how these habits can be broken or subverted through policy fixes. The standard story starts by drawing attention to how externalities like environmental degradation are unpriced, and therefore have no meaning for the decisions made by individuals. In Saskatoon, the important externalities are those which shift the price of housing and transportation choices. Therefore, by aligning property development levies and road use charges to accurately reflect the environment costs of different choices, the City can shift settlement and mobility patterns towards more sustainable forms. Relying on coercion through pricing of externalities can also help the City avoid future operational, capital, and policy costs created by unsustainable patterns of behaviour, such as road maintenance and landfill replacement. Related to this is the pro-sustainability emphasis on forcing the producers of waste and pollution to pay for the collection, storage, and processing of their debris where possible, and the remediation of its impacts where not. Again, the fix here involves exercising the coercive authority of the municipal government to induce behavioural change.

There are variations of these stories which emphasize more passive approaches to building a sustainable city. For instance, one pro-sustainability argument holds that individuals currently make unsustainable choices because alternatives are less convenient. Where the City can exercise its policy and spending powers to make sustainable behaviours more convenient, improvements will be achieved without coercing shifts in behaviour. A second example stresses how urban life often takes people out of contact with natural systems, thereby encouraging a lack of awareness regarding the interdependent nature of life. This lack of awareness means the needs of non-human species, and the natural systems relied upon by all species, are typically not recognized when individuals make decisions. The City can
encourage individuals to make these associations by designing urban life around natural systems, rather than reshaping them to meet human needs. By incorporating natural wetlands and conserving habitat within the boundaries of Saskatoon, the City can create opportunities for residents to build an appreciation of the interconnectedness of life and humanity’s reliance on natural systems.

7.3.3 Anti-Sustainability Heroes, Victims, and Villains in Saskatoon

The anti-sustainability camp identifies few heroes in its narratives, and keeps their motivations straightforward. Most prominent are elected officials, specifically those who work to prevent the City from expanding into new programming areas which would raise municipal expenditures and property taxes. A second, far rarer type of hero are the citizens of Saskatoon who have purposefully set aside employment opportunities in municipal services for the intellectually and physically challenged, positions which would disappear if these services were re-oriented towards meeting different goals.

The villains in anti-sustainability narratives are, unsurprisingly, the elected and municipal officials who promote the implementation of new programs, and thus increase City spending. These villains take the already-limited resources of Saskatoon’s government away from its core services, such as road construction and maintenance, forcing the City to either lower the quality of these more critical concerns or to raise revenues by taxing the citizens and businesses of Saskatoon more heavily. A second category of villain are from the same collection of actors, specifically those officials who would establish new goals for existing services, and thereby eliminate the opportunities they currently provide to the disabled.
Victims in anti-sustainability narratives are typically the citizens and businesses who will be forced to pay for programmatic expansions, regardless of their interest in participating in those new programs. Mentally and physically disabled residents are also victims in these stories, as they will be left behind as the City implements pro-sustainability programs like single-stream curbside recycling.

### 7.3.4 Anti-Sustainability Scenarios & Arguments in Saskatoon

The stories told by the anti-sustainability coalition come predominantly in the form of arguments, with premises and conclusions. They are both fewer in number than their pro-sustainability equivalents, and less causally sophisticated.

The first story goes as follows. Citizens of Saskatoon are opposed to the City expanding into pro-sustainability initiatives like curbside recycling and expanded public transit services. Some public opposition is based on an unwillingness to use the service, some is based on a belief that the service is not core to the City’s responsibilities, and some is based on the idea that the problem is not severe enough to warrant taking publicly-funded action. What unites these opponents is an unwillingness to pay extra for these services, or to see dollars reallocated to the same. Based on this public opposition, the City should not implement pro-sustainability programs.

The second story is specifically focused on investments in transportation infrastructure of all types. In Saskatoon, an overwhelming majority of trips are taken by car. Accordingly, an overwhelming majority of public dollars spent on transportation infrastructure ought to be directed towards the needs of cars. Parking ought to always be readily available, cars should not lose transportation space in favour of other modes of travel, and congestion challenges should be addressed by building more roads and bridges. Alternative means of transportation are not practical give
Saskatoon’s long and harsh winters, and dollars should not be spent on active transportation networks which will be in use less than half the year by a slim collection of residents.

The third story is also focused on transportation, specifically public transit. Public dollars directed towards mass transit are a subsidy to the system’s users, and needs to be controlled to keep municipal spending at an acceptable level. In addition, transit riders represent a small minority of all commuters on the city’s road network. Because this service is used by so few residents of Saskatoon, and because of the need to control public spending, individual riders should pay as great a share as possible of the costs of public transit. Annual fare increases are therefore acceptable, especially considering the rising cost to the user is still below the cost of owning a personal vehicle.

8. A Case Study of Edmonton

Facilitating comparison between our two cities requires discussing the same policy subsystems in each, solid waste management and public transportation. While Edmonton is considerable larger than Saskatoon, the challenges of these two issues are salient in each. The codes and database queries applied in Saskatoon were applied here as well, and there are some interesting points of divergence between the two. First, there appears to be a wider range of actors involved in policy making in Saskatoon; while journalists and activists do appear in the events below, their participation is more sporadic and less significant than in some of Saskatoon’s events. Second, environmental outcomes are far less of a motivating factor behind policy choices in Edmonton than in Saskatoon. Actors in Alberta’s capital promote environmental improvements as justification for action only rarely, and even then, only in concert with another benefit of action, typically cost avoidance or revenue generation. Third, conflict over policy options is even more rare in Edmonton than Saskatoon. This may be related to the first point (fewer actors from fewer background means less divergence in perspectives among
policy makers), or it may be that policy making in Edmonton may be even more conflict-adverse than the other city.

8.1 Revenue Generation and Incentivizing Waste Reduction in Edmonton

The first significant event related to solid waste policy during this period was the opening of a co-composter in Edmonton, built by TransAlta to process organic and sewage waste into fertilizer. When the facility first began operating, TransAlta had an agreement which would see the City of Edmonton pay the private company to take these materials, the city’s objective being to divert waste from the municipal landfill. According to Connie Boyce, communications manager with the city's waste management branch, replacing that landfill could potentially cost between $100 and $150 million, making the thirty-year agreement with TransAlta a net cost savings. Mayor Bill Smith also promoted the partnership on financial grounds, claiming the facility proved "how engineering and science can turn household garbage into a valuable commodity" (Mandel, 4 March 2000).

The editorial board at the Edmonton Journal used more moderate language regarding the possibilities represented by City's waste diversion efforts, calling the co-composter "both a financial risk and a political one," but also suggested Edmonton "didn't have any good alternatives" to waste diversion, and agreed with Mayor Smith that "Edmonton can be proud of the role it has played in pioneering an alternative that appears to be both workable and environmentally responsible" (E-J Editorial Board, 8 August 2000). The board also agreed with Boyce's contention that the partnership was a money saver in the long run, and argued that Edmonton's overall residential waste diversion rate of 70 per cent was something to be proud of (E-J Editorial Board, 26 October 2000; Mandel, 5 March 2000).
A major change in this partnership came less than a year into the co-composter's operations, however, when TransAlta announced that it would try to sell the facility. Mayor Smith was unconcerned, claiming that the City's relationship with the facility would remain the same no matter who the owner was (Warwaruk, 22 December 2000). By the middle of 2001, city council had decided in a closed-door meeting to purchase the facility for $97 million and hold it as a municipal asset (O’Donnell, 23 March 2001). Councillor David Thiele was supportive of the purchase, calling the co-composter "really, really valuable…[as it] provides us with a long-term look at how we deal with our environment" (Gerein, 5 September 2003). Mayor Smith joined Councillor Thiele in defending the facility, arguing that "putting garbage in landfills will end and it will end abruptly one of these days …people that are sticking it in the ground for $30 to $40 a tonne are going to get an awakening" (O’Donnell, 12 September 2003).

Purchasing the co-composter was only one of a suite of initiatives intended to divert waste from the city landfill. In late 2001, Mayor Bill began promoting a waste management centre to be based around existing city garbage and sewage handling facilities (Brooymans, 12 October 2001; Johnsrude, 26 November 2002). Smith envisioned this centre as providing research and training opportunities to city administrators working on waste diversion, as well as a site for businesses working on waste processing technologies to cluster. "I'm calling it the university of garbage," explained Smith (Olson & O’Donnell, 5 July 2002). The editorial board of the Edmonton Journal was skeptical, suggesting that recycling was "something Alberta needs to do for the sake of the environment, but it may not be the great business opportunity the mayor hopes for," and stressed that any business which did come into the city should not be provided with any taxpayer-funded incentives to do so (E-J Editorial Board, 9 July 2002; E-J Editorial Board, 14 September 2002).

Mayor Smith would not be dissuaded, however, and used a trip to Germany to try and recruit recycling technology developers to Edmonton (O’Donnell, 27 July 2002; E-J Staff, 2 September 2002).
Even after losing the mayor’s chair to Stephan Mandel in 2004, city administrators and elected officials made repeated attempts to attract companies to the facility, efforts which eventually saw businesses focused on electronics recycling, biofuels, waste management training, construction waste upcycling and compost processing locate at the Edmonton Waste Management Centre of Excellence, the official name of Smith’s ‘Garbage University.’ (O’Donnell, 12 August 2003; Brooymans, 9 July 2005; LoPinto, 23 November 2005; Gordon, 25 March 2006; Kyle, 23 June 2006; Collum, 27 June 2008; Pratt, 19 December 2008; Gordon, 16 December 2011; Lewis, 6 March 2012). The importance of the institution was promoted on environmental and financial grounds, with Councillor Iveson stressing that "closed-loop recycling…significantly reduces the raw materials and energy needed to make new products" (Loyie, 22 January 2009), while Connie Boyce argued the Centre could eventually mean a residential waste diversion rate of 90% while also create revenue generation opportunities for Edmonton (Cooper, 21 May 2009; Brooymans, 8 August 2009; Cooper, 29 October 2012).

How to pay for solid waste collection was another noteworthy event in the period covered here. In late 2005, Mayor Stephan Mandel (Smith’s successor) signaled that he would like to see some changes to the current regime - where municipal waste collection was paid for through a combination of user fees and property taxes - to a regime based solely on flat user fees based on the value of residential properties (Gerein, 13 December 2005). While administration pushed forward with developing a plan to move to an entirely user-pay funding, Mandel suggested he may be supportive of a ‘tag-a-bag’ approach – where residents would purchase garbage bag tags and thus have an opportunity to spend less on waste disposal – but also cautioned he wanted to protect lower-income households from increased fees (E-J Staff, 11 January 2006; Gerein, 21 February 2006).

Opposition came on multiple fronts. Professor Jim Lightbody, a political scientist at the University of Alberta who specialized in municipal government, called the shift towards user fees "a sneaky way to hold tax increases to twice the inflation level" (Sadava, 17 December 2005), while The
Edmonton Journal's Scott McKeen warned that people would dispose of their waste illegally in back lanes before buying tags (McKeen, 17 February 2006). Councillor Jane Batty claimed she heard overwhelming opposition to the change from her constituents, a claim reflected in administration’s decision to halt consultations due to public opposition (Gordon, 14 April 2006).

The debate resumed in 2008 when council signaled that it would again investigate the possibility of moving to a pure user-fee, the intention being to incentivise waste reduction. Councillor Ben Henderson spoke in favour of this intention, while his colleague Councillor Bryan Anderson warned that residents had already made their opposition clear (Ruttan, 19 March 2008). However, public consultation found far less opposition than in earlier years, and plans were put in place to move to a flat fee. Critically, this shift would not provide households an incentive to reduce waste, and the fee was increased on a regular basis as per capita waste production increased in following years (Gordon, 22 October 2008; Gordon, 10 July 2010; Brenneis, 25 July 2010; Gordon, 6 December 2011).

In response to this per capita growth, Roy Neehall of the waste management department submitted a report to council's utility committee which proposed investigating a differential rate structure, one which would see households which sent less waste to the landfill charged a lower user fee. Unlike the earlier tag-a-bag proposal, this program would require participating households to opt-in by registering with the city, and be subject to periodic compliance audits. Neehall explained that his department's proposal would result in “a financial benefit being realized by homeowners who produce very low volumes of waste...hopefully we will be able to reduce the rate at which waste is generated in the growing city…” (Gordon, 6 April 2011; Gordon, 24 February 2012). By the end of 2012, no decision had yet been taken on this differential rate structure.
8.2 An ACF Discussion of Edmonton’s Approach to Solid Waste Management

The beliefs of actors can be spotted in the events discussed above. What is more difficult, however, is establishing clear instances of coordination between actors, as well as boundaries between coalitions. The non-trivial conflict required for such entities to form is simply not apparent here, even though the changes discussed represent significant departures from the status quo and – in the case of the co-composter – involve the City taking on significant financial risk. Here then, the beliefs of actors will be shared, but no attempt to pigeonhole them into opposing coalitions will be made.

Overall, positions on three policy core beliefs united the members of this subsystem, with the first far more commonly expressed than the latter two. Most prominently, that waste diversion is an opportunity to generate revenue and economic development, not just avoid costs. Second, that waste diversion represents the pro-environment ethic of the city’s residents. Third, that individuals ought to be incentivized into reducing their own waste through implementation of a user-pay and differential fee system.

Mayor Smith was the most consistent proponent of the first policy core belief, repeatedly claiming that solid waste represented a business opportunity as well as a management challenge. He shared this perspective on numerous occasions, including at the opening of the facility, when accepting an award from the Alberta Emerald Foundation following the City’s purchase of the co-composter, and when defending the facility from an unfavorable auditor’s report (Mandel, 4 March 2000; Reston, 2 June 2000; Warwaruk, 22 December 2000; O’Donnell, 12 September 2003). Smith also used this belief as justification for his advocacy of the ‘Garbage University’ initiative (Hall, 5 August 2000; Brooymans, 12 October 2001).
This belief is largely unremarkable in terms of historical norms in relation to municipal government, namely that the primary role of local authorities is to encourage economic development. What is noteworthy here is that this historical preoccupation is being wedded to an urban function which contributes directly to urban environmental sustainability. Pro-sustainable policy may be the consequence of Smith's expressed beliefs on why garbage university is desirable, but it is a by-product of a more immediate focus on economic development, not the primary motivator of action. Even the few members of council who expressed criticism of Smith's plans - Gibbons and Hayter - did so while endorsing the Mayor's belief that municipal waste management could be approached as an economic development opportunity, an example of soft coordination (Thorne, 13 September 2002). This belief is also worth nothing because it provides a rational for action – specifically by purchasing the co-composter, but also more generally for engaging in waste diversion directed by a public authority – based on the potential to obtain a benefit, not solely avoid a penalty or loss. From this perspective, the co-composter is only the first component of a larger set of initiatives with their own larger goals, not an end solution in-and-of-itself.

One of the few examples of conflict over beliefs is in relation to this point, though opposition was only provided by one actor. The editorial board of the Edmonton Journal opposed both the Mayor's specific plans on bringing companies to Edmonton and as his general belief in the possibility of generating revenue from waste processing. Instead, they argued that recycling is "something Alberta needs to do for the sake of the environment," not in order to create jobs or new revenue streams for government (E-J Editorial Board, 9 July 2002; E-J Editorial Board, 14 September 2002). The board endorsed such activities only where they avoided future costs, such as the purchase of the co-composter’s role in putting of the need for a few landfill (E-J Editorial Board, 8 August 2000; E-J Editorial Board, 26 October 2000; E-J Editorial Board, 16 August 2004).
In ACF terms, the conflict here is largely based on secondary beliefs, or instrument settings. The board of the EJ did not oppose the economic development focus of the Mayor's office wholesale, but rather Smith's position that this municipal activity could be carried out in such a way that development resulted. This may be why the board only offered infrequent criticism of Smith's activities. The narrow range of actors who made their positions on these events, and by proxy their beliefs, suggests that the policy community around solid waste management in Edmonton may be particularly narrow, with few participants from outside the elected and administrative classes. This suggestion raises a question of fit between ACF's assumptions of what the policy process looks like and the reality of municipal policy making.

The second notable belief was shared during debates around the various user-pay proposals described above, with only a short list of actors speaking in favour. Roy Neehall, Donna Gray, and Councilor Amarjeet Sohi are included here, and only the latter expressing any reservations about the policy shift. Both Neehall and Gray promoted the change to reduce resident's per capita waste production, while the councilor cautioned that his support was contingent upon lower income households not being adversely affected (Gordon, 6 April 2011; Gordon, 24 February 2012). This is a rare example of an overtly pro-sustainability belief being expressed, one which justified a policy preference not because it would generate revenue or keep taxes from rising, but because the policy would reduce an environmental burden. Hence, this position is suggestive not only of a secondary belief (regarding the setting of collection rates according to a sliding, usage-based schedule), or a policy core belief (regarding how the City ought to design a service), but a deep core belief as well, one which implies that the natural environment ought to be protected for its own sake. This can only be a tentative claim, however, given that the lack of conflict between competing coalitions means the boundaries and character of policy beliefs on user-pay lack a certain sharpness.
Critics of user-pay pointed to public rejection of the approach – specifically in the form of tag-a-bag, which would have incentivized reduced of service use – as justifying their opposition. This collection included including Councillors Batty and Anderson, as well as the Edmonton Journal's Scott McKeen (Gordon, 14 April 2006; McKeen, 17 February 2006; Ruttan, 19 March 2008). Here, actors constructed an opposition which contained no obvious environmental element whatsoever, a curious omission on considering how routinely policy actors had touted Edmonton's commitment to reducing and diverting waste to this point. Accordingly, the positions of these actors suggest that environmental sustainability was not a top-of-mind concern, or in ACF terms, that the municipal solid waste policy subsystem and the environmental sustainability policy subsystem did not substantively overlap.

The final noteworthy belief had to do with what these policy choices meant in terms of the environmentalism of Edmonton’s citizens. In short, events described here were proof of residents’ pro-environment ethic, a relationship of which citizens ought to be proud and proactive about promoting as a point of local identity. This belief was shared by Connie Boyce, Mayor Smith, and the Edmonton Journal (Mandel, 5 March 2000; Hall, 5 August 2000; E-J Editorial Board, 8 August 2000; E-J Editorial Board, 26 October 2000). The editorial board of the Journal also expressly stated that waste diversion was worth supporting solely for the environmental good it could do, while Councillor David Thiele expressed similar beliefs (E-J Editorial Board, 16 August 2004; E-J Editorial Board, 9 July 2002; O’Donnell, 12 September 2003). This position was, of the three discussed, the most clearly value-laden, as it spoke to the identity of the city and the beliefs of its residents regarding how the natural environment ought to be treated. It represents an example of both a policy core belief, in that composting and recycling were appropriate methods of protecting the environment, and a deep core belief, owing to the fact that it holds environmental protection as a worthy end for government to pursue in-and-of itself.
Finding Funding for LRT and BRT Expansion in Edmonton

Policy discussions over public transit in the 2001-2012 period were largely focused on expansion of Edmonton’s LRT system, implementing BRT as a precursor to LRT growth, and how these expansions would be funded. All were relevant during both council sessions and electoral periods, with candidates frequently making their positions on these issues part of their campaigns, and coordinating statements with other campaigns.

Building the LRT out to Edmonton’s south side was boosted up the municipal policy agenda following the federal government’s announcement that funds for such projects would be made available in that year’s budget. Councillor Michael Phair was optimistic these funds would be made available to Edmonton, given the City had been working on the south extension for nearly two years and was home to two members of Parliament sitting in government (Thorne & Ovenden, 1 February 2001; Loyie, 2 March 2001; Pedersen, 5 March 2001). The editorial board at the Edmonton Journal took a more cautious view of the federal government's comments, warning that these dollars may trigger a "spending stampede," and that "what would have been a perfectly acceptable Chevy project [may transform] into a Cadillac;" at the same time, the board also opined that transit needed to receive enough support to be competitive with the personal auto in order to reduce stress on transportation infrastructure and the environment (E-J Editorial Board, 16 January 2001). The board also encouraged the federal government to establish a dedicated fund for improving public transit in cities, again to reduce the environmental and infrastructure costs of private vehicles (E-J Editorial Board, 23 July 2001).

Edmonton’s 2001 election saw four councillors build their campaigns around LRT expansion; Dave Thiele, Allan Bolstad, and Michael Phair all supported this agenda, with Bryan Anderson speaking for the group when he explained that rapid LRT expansion was "necessary for the health of
our city" (Mah & O’Donnell, 22 September 2001). Councillor Dave Thiele also argued that with interest rates at historical lows the City could afford to abandon its tradition of not borrowing – established in the early 1980s – to fund capital projects, while Councillor Michael Phair suggested that if the City waited to get funding commitments from the provincial and federal governments on every capital project, nothing would ever get built, a position he would reiterate over the years while again promoting shared campaign platforms (O’Donnell, 17 March 2002; E-J Staff, 16 March 2002; E-J Editorial Board, 23 April 2003; Janus, 15 July 2003; E-J Editorial Board, 29 September 2004). This ‘no borrowing’ policy ended in late 2002 when council voted to approve borrowing up to $250 million to fund a backlog of infrastructure projects – the LRT south extension one among them – in a 7-6 split vote that Mayor Bill Smith called a "costly mistake" (Mah, 17 October 2002).

Smith’s position on borrowing fluctuated over a relatively short time frame. Ahead of the 2001 election, Smith argued that the LRT system was not in crisis and borrowing to fund expansion was not necessary (Mah & O’Donnell, 22 September 2001). Following his re-election, Smith claimed he would cut funding for LRT expansion to keep the municipal budget from growing more than inflation; less than a month later, however, Smith was suggesting that the city may need to end its ‘no borrowing’ policy because of Edmonton’s LRT needs. Ahead of the October 2002 vote that ended the ‘no borrowing’ policy, Smith returned to his earlier position that the remainder of the LRT extension could not begin until the City had guarantees of support, arguing that without these pledges Edmonton could not engage in long-term transit planning (O’Donnell, 1 October 2002). Smith’s position changed again following his win in the 2004 election, with LRT expansion a high priority in his campaign platform because "high gas prices and the pressures of Kyoto are increasing the demand for fast, convenient public transit" (E-J Staff, 17 October 2004).

Avoiding the financial risk of borrowing was also a priority of Smith’s successor, Mayor Stephan Mandel. Accepting $700 million in provincial funding for LRT expansion was attractive
because to would eliminate the need to borrow, thus avoiding debt service charges and future municipal
tax increases, but also increasing total construction time (Gordon, 17 February 2005; Simons, 24
February 2005; Gerein, 26 February 2005; Gerein, 2 May 2005; Gerein, 27 May 2005).

Funding expansions of Edmonton’s bus rapid transit (BRT) network was a topic debated along
similar lines. While a 2004 comprehensive transit plan called for these expansions, and 2005/2006
consultations by administration resulted in advice on routes for council, Edmonton’s counsellors
decided to cut funding to BRT planning by half, arguing that inflation in construction costs meant
provincial grants would no-longer cover the cost of expansion. Brice Stephenson, the City's manager of
transit planning, had explained earlier in the year that BRT was required because "we never expected to
be able to build our way out of congestion" (Faulder, 17 September 2006). Councillor Karen Leibovici
voted against the cut, calling it "short-sighted," and argued that "a connected system of high-speed
transit initiatives has been missing for 20 years in Edmonton;" at the Edmonton Journal, the editorial
board suggested "there is nothing smart about the way [council] has handled BRT" (E-J Editorial Board,
4 October 2006).

Even when BRT returned to council’s agenda the following year, it came with controversy;
routes proposed by administration sparked opposition from the Mature Neighbourhoods Action Group,
a collective of three dozen neighbourhood associations; their president, Bill Eadie, argued that
reserving traffic lanes exclusively for BRT buses would make it impossible to travel through the
affected neighbourhoods, and pushed planners to instead expand the LRT system (Wingrove, 7 June
2007; Wingrove, 17 June 2007a; Wingrove, 17 June 2007b; Wingrove, 9 July 2007). The editorial
board at the Edmonton Journal questioned the continued focus on building transit systems around
diesel buses, considering that "reducing greenhouse gases is now mandatory under federal and
provincial government policy," and echoed the concerns of the Mature Neighbourhoods Action Group
that dedicating lanes to buses would make traffic unbearable (E-J Editorial Board, 19 June 2007).
Council ultimately accepted the administration's plans over the objections of the Mature Neighbourhoods Action Group, with Councillor Karen Leibovici suggesting that "if we don't have the courage to make the decision…there will never be that [BRT] corridor" (Ruttan, 11 July 2007).

Stop-and-go development on BRT continued with the hiring of a new transit manager for Edmonton. Bob Boutilier halted all development on the system at the end of 2007, his intention being to redirect resources to LRT expansion and the development of a regional line (Ruttan, 6 December 2007; Ruttan, 23 January 2008; Prat, 24 February 2008a). In in-depth interviews with the Edmonton Journal, Boutilier prioritized: securing right-of-ways for future LRT lines; promoting urban density through LRT infrastructure; developing a regional approach to transit; and securing the funds required for Edmonton transit's capital investment plans, approximately $8 billion in total (Pratt, 24 February 2008b; Ruttan, 13 March 2008). BRT was not among these priorities, and Boutilier was supported in his decision to redirect his department's focus by Mayor Mandel, who shared his focus on LRT expansion within Edmonton and across the region (Ruttan, 15 March 2008). Boutilier’s opposition to BRT softened over his tenure, suggesting in 2011 that expanding this system could serve to occupy land which would eventually be needed for LRT corridors; even still, Boutilier warned that BRT could not drive urban redevelopment in the same way LRT would, the transience of a bus route working against the desire of business to make permanent investments (Staples, 13 May 2011). Boutilier also signed off the equipment upgrades that a BRT system would require, including GPS trackers on buses and a computerized dispatch centre that would be able to change traffic signal timings to speed up late buses (Gordon, 3 February 2011; Gordon, 31 August 2012).

8.4 An ACF Discussion of Public Transit Funding Debates in Edmonton

Finding actors with positions on the debates discussed above – and spotting the beliefs behind the debates – is straightforward. What is more difficult is identifying clear and sustained points of
conflict between camps. Accordingly, making a claim that advocacy coalitions focused on public transit policy in Edmonton is impossible. Here then, beliefs and instances of coordination will be highlighted with little effort made to divide participants into competing camps. On LRT, actors include:

- Mayor Bill Smith
- Councillor-then-Mayor Stephan Mandel
- Councillors Bryan Anderson, David Thiele, Michael Phair, and Alan Bolstad, the ‘LRT Four’ during the 2001 election
- Councillors Bryan Anderson, David Thiele, Michael Phair, Janice Melynchuk, and Ed Gibbons, the LRT Five’ during 2004’s election
- the editorial board of the Edmonton Journal

One belief which did distinguish actors from each other was about whether the City should borrow to fund expansions to public transit. Mayor Smith was opposed to the idea, arguing against the LRT Four during the 2001 election campaign that expanding the light rail system was important enough to warrant ending Edmonton's long-running policy of not borrowing, and suggesting following the election that he would halt design and expansion work on the system until outside funding was secured (Mah & O’Donnell, 22 September 2001; Mah, 20 October 2001). Even after the City received limited federal funding for a small portion of the south extension, Smith argued that further work should be delayed until more money was forthcoming (O’Donnell, 1 October 2002). Multiple instances of soft coordination occurred between Smith and the editorial board of the Edmonton Journal on this belief in the early years of our study period (E-J Editorial Board, 16 January 2001 E-J Editorial Board, 23 July 2001; Mah & O’Donnell, 22 September 2001; E-J Editorial Board, 22 November 2001).

This preoccupation with avoiding debt until outside funding was also available is properly understood as a policy core belief, rather than a deep core; if the position taken had been debt was to be avoided, period, labeling it as an expression of deep core preferences would be more justifiable. Instead, what we see here is a combination of deep core aversion to publicly-held debt combined with subsystem knowledge related to the value of a comprehensive mass transit system. To this pairing of
actors, capturing this value is desirable, but not at any price, a claim buttressed by Smith's consistency in lobbying for external funding (O'Donnell, 3 February 2002; Johnsrude, 18 February 2002; E-J Editorial Board, 1 November 2003; E-J Editorial Board, 2 February 2004).

On the other side were the LRT Four and Five, Councillor Stephen Mandel, and, eventually, the editorial board of the Edmonton Journal. During both the 2001 and 2004 municipal elections. This position was based on beliefs that low interest rates were an opportunity not to be missed, and that waiting for outside money would mean the LRT would never be expanded at all (Mah & O'Donnell, 22 September 2001; O'Donnell, 17 March 2002; Janus, 15 July 2003; E-J Editorial Board, 29 September 2004). This is a rare example of hard coordination between actors, and given that the LRT Four successfully attracted the three extra votes needed to end the no-borrowing policy at the close of 2002, a successful example as well (Mah, 17 October 2002).

While Councillor Stephan Mandel did not join the LRT Five during the 2004 election campaign, he did come out in favour of borrowing to build before outside funding had been secured; his position was supported by the editorial board of the Edmonton Journal, who justified a shift in their position by referencing Mayor Smith's lack of success at securing outside funding (E-J Editorial Board, 23 April 2003; E-J Editorial Board, 25 September 2003; E-J Editorial Board, 1 November 2003; E-J Editorial Board, 29 September 2004). Councillors Michael Phair and transit planner Brice Stephenson also promoted the borrow-to-build position, specifically because increasing ridership signaled a need and public appetite for expansion (Gordon, 28 May 2007). As above, the pro-borrowing camp's position ought to be understood as an instance of policy core beliefs at work rather than deep core. Like Smith, many of the actors in the pro-borrowing camp looked to the federal and provincial governments for support in expanding Edmonton's LRT. The sole, significant difference was that this group of actors wanted the City to be proactive and use its borrowing power to get projects started, the hope being that an underway project would attract support more readily than a proposed project. As with the anti-
borrowing group, the LRT was understood to be a valuable amenity based on its ability to reduce congestion, greenhouse gas emissions, and spur densification, but unlike the anti-borrowing group, these benefits were believed to be worth the cost of proactively taking on debt.

Mayor Mandel’s position was somewhat different from his position while Councillor. As Mayor, Mandel shared his belief that LRT extension ought to proceed only after federal or provincial funding support had been secured (Gerein, 26 February 2005; Gerein, 2 May 2005; Gordon, 1 June 2005; Gordon, 27 April 2007). Mandel argued that delaying the LRT until external money was available would help avoid spikes in property taxes which could become necessary if the City took on too much debt (Gordon, 17 February 2005; Simons, 24 February 2005). The Mayor acted according to this belief, using provincial grant money to pay fleet replacement costs as well as expansion of the overall transit system (Gerein, 27 May 2005; Gerein, 8 December 2005).

Why this significant shift between elections? Perhaps because the largest point of conflict – whether to borrow ahead of support from other orders of government – was settled in the at the close of 2002. Members of the LRT Four and Five were still members of council, including Stephan Mandel. It may be that conflict over borrowing became muted because most of these actors felt their goals had been achieved earlier, and thus they had no reason to continue coordinating on the borrowing-to-build issue. However, given that advocacy coalitions are argued to be long-lasting collections of actors interested in a specific policy subsystem, the fact that debate this issue went relatively quiet may mean that there are no advocacy coalitions present at all – or perhaps only nascent ones – focused on public transit in Edmonton.

Moving now to a discussion of the events around BRT, our list of actors is as follows:

- Mayor Stephan Mandel
- Councillor Karen Leibovici
The pro-BRT group was comprised of Stephenson, Councillor Leibovici, and the editorial board of the Edmonton Journal, with the common thread linking all three being a belief in the need for an integrated, city-wide public transit system which provided more extensive service than the LRT. Stephenson identified this as the administration's goal when presenting the BRT plan to council in 2006, and city-wide service was also identified as a goal during the earlier public consultations (Faulder, 17 September 2006 Gerein, 14 January 2005; Jones, 24 June 2005). Councillor Leibovici engaged in soft coordination with Stephenson when she justified her vote against the majority's decision to defund BRT planning by arguing Edmonton needed the kind of integrated public transit system that BRT could provide, and acted according to her beliefs by voting in favour of unpopular routing for the reduced system (E-J Editorial Board, 4 October 2006; Ruttan, 11 July 2007). The board at the Edmonton Journal also engaged in soft coordination by expressly agreeing with Councillor Leibovici, arguing that "people are sick and tired of a city that goes low rent and gets further behind" (E-J Editorial Board, 4 October 2006).

The belief here is not just that BRT was important to Edmonton, but that a comprehensive public transit system was important, one which relied on a mix of technologies in order to provide service across the entire city. What is not explained by any of these three actors is just why that comprehensive system is important, what problem it is intended to solve or benefit it is supposed to capture. For example, reducing congestion by getting people out of their private vehicles or reducing emissions from transportation by doing the same thing are both justifications for investing in BRT, but they suggest very different things about the belief systems of their proponents. These three actors,
however, do not provide complete justifications for their policy preferences, making it difficult to label those preferences as expressions of deep core, policy core, or secondary beliefs.

The anti-BRT group consisted of Mayor Mandel, the Mature Neighbourhoods Action Group (MAG), Bob Boutilier, and, contradictorily, the editorial board of the Edmonton Journal. As above, the thread connecting these actors was a shared belief that BRT would draw resources away from LRT expansion, on which the City ought to focus. Bill Eadie of the MAG made this connection directly when explaining why his organization – representing three-dozen of Edmonton's neighbourhood associations, making the MAG an example of hard coordination – opposed the BRT routes planned by city administrators (Wingrove, 7 June 2007; Wingrove, 17 June 2007b). The Edmonton Journal named the MAG's position and agreed with it, an example of soft coordination, arguing it would be contradictory to expand the city's bus system in an era where reducing emissions from transportation was a priority (E-J Editorial Board, 19 June 2007). In his detailed interview with the Edmonton Journal, Bob Boutilier identified multiple priorities related to expanding the LRT, while simultaneously explaining that development of the BRT would end in order to redirect resources to those priorities. Boutilier was supported in this emphasis by Mayor Mandel, who argued that the LRT was simply a higher priority in expanding the city's mass transit system (Prat, 24 February 2008a; Ruttan, 15 March 2008).

It is important to stress here that opposition to the BRT plan was not based on opposition to public transit. The MAG was concerned about private vehicles losing roadway space, and were supported in this concern by the Edmonton Journal, but even that collection of actors wanted to see continued expansion of the capital-intensive LRT system. Instead, the opposition was based on a dislike of a transit technology, BRT, suggesting that the conflict between the pro- and anti-BRT actors was based on different secondary beliefs, or instrument settings. This may explain why other members of council – recall that the LRT Four and LRT Five were still on council in this period – did not agitate
for BRT's implementation; their higher-order priority, or policy core belief, was about developing public transit altogether with a secondary belief focus on LRT as the means to do so. As neither of these beliefs were threatened by the anti-BRT crowd, a hotter conflict between the two camps was not provoked.

9. Informant Interviews in Edmonton

As in Saskatoon, participants were solicited from a list of candidates generated in the course of reviewing the historical record. These first-round picks were asked to suggest additional participants, a snowballing approach which continued until new names were no longer emerging from the recommendations. In this way, personal biases were not dominant in determining who was a possible participant, and drew a sketch of the current membership of the urban sustainability policy subsystem.

Unlike in Saskatoon, participants were interviewed over the phone rather than in-person, a difference which may explain the difference in absolute number of participants. Establishing rapport was more challenging, but lack of time and money for travel necessitated reliance on this approach. Only eight individuals agreed to participate in this phase of the project, less than desired but still representing a broad swath of different roles and offices in Edmonton’s policy system. Elected officials, journalists, academics, administrators, and activists can all be found among the Edmonton interviewees, meaning no breach of ACF’s expectations regarding subsystem membership has occurred.

The set of questions directed at participants was the same as in Saskatoon, facilitating cross-city comparisons regarding local understandings of urban sustainability, latent and explicit theories of how policy change comes about, and inventories of which resources are most helpful when attempting to achieve change. Overall, there are striking similarities between the two cities on all of these points. First, as in Saskatoon, respondents did not often come across as clear proponents of either the strong or
weak approach to understanding sustainability, suggesting again the limited value of this academic dichotomy in understanding practitioner views. Second, and again similar to Saskatoon, an ACF understanding of how policy change occurs is not mirrored in interviewees’ statements on change. Participants described a policy process in which aversion to conflict is a norm shared across actors – conflict being necessary under the ACF in establishing boundaries between coalitions – in which hard coordination between actors is exceedingly rare, and where no technical or professional forums exist in which debates over urban sustainability occur, meaning there are few institutionalized opportunities for shared definitions and problem frames to develop and coalitions to organize around.

9.1 The Meanings of Sustainability in Edmonton

This set of questions was intended to elicit statements suggestive of participant’s values and believe regarding urban sustainability, and included high-level asks such as “what does urban sustainability mean to you,” and more policy-focused queries like “if urban sustainability is to be achieved, what does Edmonton need to do?”

9.1.1 Ecocentric vs. Anthropocentric Valuations of Nature

As a refresher, this pairing of codes was primarily about identifying the beneficiaries of urban sustainability. Participants who suggested the beneficiaries included non-human species and natural systems would be labeled with the ecocentric code; participants who identified only humans as potential beneficiaries would have the anthropocentric code applied to their statements. Edmonton respondents were a unified bunch on this value dichotomy, with all eight participants promoting an anthropocentric view and thus coming down on the side of weak sustainability.
Several respondents hinted at their own deep core beliefs when they promoted a three pillars approach to sustainability, where a balance of economic, social, and environmental factors naturally produced sustainability as a system characteristic. ER1 spoke for several of her colleagues when she explained that “urban sustainability in my mind is absolutely environmental sustainability, but also the economic sustainability of the community along with social sustainability” (ER1, 16 December 2014; SEE ALSO ER3, 10 December 2014 & ER5, 23 December 2014). This perspective puts these respondents firmly in the mainstream of sustainability thought, and locates human needs at the centre of concerns around sustainability.

Many respondents worked to clarify the needs served by pro-sustainability initiatives, with improving quality of life a clear commonality among this grouping and thus representative of a policy core belief. To this collection of participants, assuring and improving human quality of life was the primary justification behind sustainability-focused policy initiatives, with ER7 defining urban sustainability’s objective as being the production of “a healthy city…[which is] a city that people want to live in…it’s not like something happens with the oil patch and everybody leaves town, the city’s dead, there’s no other reason to be here” (ER7, 3 December 2014). More specifically, elements of a healthy city, and contributing elements to resident’s quality of life, included housing availability and affordability, social diversity, and the quality of public transit networks (ER1, 16 December 2014; ER4, 10 December 2014; ER6, 15 December 2014; ER7, 3 December 2014).

Multiple respondents suggested that while the beneficiaries of urban sustainability measures are human, there is a significant time lag between the purchasing and the enjoyment of the benefits, meaning that achieving urban sustainability may require a degree of altruism. ER1 spoke to this perspective when he explained that “you can invest billions of dollars into the LRT now…and reduce people’s contribution to greenhouse gas emissions, but that benefit’s not going to be seen in the short-term, but the investment is up-front, right now” (ER1, 16 December 2014). This lag between costs and
benefits was highlighted by respondents with different roles in the policy process, suggesting a shared problem frame as well as a policy core belief (ER2, 22 December 2014; ER4, 10 December 2014; ER5, 23 December 2014).

9.1.2 Absolute vs. Temporary Limits to Growth

This code pairing is about whether participants believed in firm limits to human activity, with constraints enforced by stocks and flows of environmental goods and services not under human control, or whether they believed such limits were temporary, and would be overcome through technology, resource substitution, and productivity gains. A clear majority of Edmonton respondents came down on the side of firm limits to human activity, and thus the strong sustainability perspective, though a couple did promote a perspective consistent with a belief in the temporary nature of limits.

There were three main threads connecting participants who were assigned the limits code. First, a belief in the need to reduce personal consumption of material goods in order to achieve sustainability. ER2 defined this shared perspective when he explained that urban sustainability is “largely about resource consumption and not using more of the Earth’s resources than we need to and basically ensuring that future generations have the same access to resources that we do” (ER2, 22 December 2014). This perspective can be interpreted as either a deep core belief, where it is relied upon to set broad boundaries on action, or a policy core belief, where it is used to justify specific policy interventions, such as user-pay waste collection or road tolls and congestion charges. In this latter sense, we can see the second connecting thread across pro-limits respondents, who shared a belief that local government ought to use its regulatory powers to require reductions in consumption of environmental
goods (ER1, 16 December 2014; ER2, 22 December 2014; ER5, 23 December 2014; ER7, 3 December 2014).

The final shared perspective among participants who expressed pro-limits beliefs was a minority within the group, but worth highlighting because of its potential to be highly disruptive if ever expressed in policy outputs. To ER2 and ER4, recognition of firm limits to human activity would require an abandonment of local government goals around growing economic activity. According to ER2, Edmonton “need[s] to stop focusing so much on economic growth…there’s a sort of built-in assumption that we need to continue to grow all the time…I think that’s an assumption that needs to change…the economy depends on a healthy ecosystem,” a clear example of a strong sustainability belief and another instance of ACF’s deep core values on display (ER2, 22 December 2014). ER4 shared a related deep core perspective when she warned that local government needed to work to ensure “the totality of our existence [is] sustainable, because we have one shot at figuring out how to live in this world without contaminating people” (ER4, 10 December 2014).

Only two respondents shared a belief in the temporary nature of limits, with little similarity between the two’s expression of this belief. In the case of ER3, the temporary limits code was applied because this respondent argued Edmonton was not facing any sustainability challenge at all, that “they’ve been living here for a hundred years and they’re doing fairly well…I wouldn’t say that Edmonton is not sustainable right now” (ER3, 10 December 2014). ER6 provided a more easily codeable example of the limits code when she explained that the real difficulty in achieving urban sustainability lay not in any environmental factors, but owed to the lack of coordination between orders of government and the piecemeal involvement of the federal government in particular (ER6, 15 December 2014).
9.1.3 Non-Substitutability vs. Substitutability of Resources

This code pairing was about whether participants believed that natural goods and services could be replicated and replaced by human-developed substitutes, or whether such resources were irreplaceable. As in the case of Saskatoon’s respondents, most respondents failed to make statements suggestive of one position or the other, suggesting that the topic is not one relevant to their policy work on sustainability in Edmonton. Only three of eight respondents suggested they did have beliefs relevant to this dichotomy, with all three opining that environmental goods and services like water filtration and air quality were intrinsic to the sustainability of the city, that the city had only limited ability to provide such goods independent of their natural availability, and that, in the words of ER5, that “if you can’t breathe the air or drink the water it doesn’t matter how good your economy is…the basis of sustainability is the environment” (ER5, 23 December 2014).

9.1.4 Behavioral vs. Technological Solutions

Every participant shared beliefs regarding whether behavioural or technological solutions would be primarily responsible for achieving urban sustainability. The majority promoted behavioural approaches, while only one participant championed the supremacy of technology, meaning the strong sustainability perspective was dominant on this value dichotomy.

The biggest commonality among respondents who shared a belief in behavioural solutions had to do with what would ensure citizens adopted sustainable behaviour, namely the convenience of the choice. If residents could continue their lives largely according to the same routines and timelines – specifically in terms of living arrangements and travel patterns – then the behaviour would be adopted with little need for coercive regulation on the part of local government, and thus at a lower administrative cost (ER2, 22 December 2014; ER3, 10 December 2014; ER4, 10 December 2014; ER5, 23 December 2014). Related to this point were suggestions that behavioural change is a precondition of
technological uptake (ER2, 22 December 2014; ER3, 10 December 2014). These claims can be read as both an expression of policy core and secondary beliefs, in the sense that they identify qualities which must be possessed by policy proposals, but also as a deep core belief, in that they suggest a certain outlook on human nature and the motivations behind choices.

Education was identified as a second catalyst of behavioural change, with two respondents arguing the city could advance urban sustainability by developing information campaigns targeted at local residents. According to ER1, citizens would change their behaviour once they “understand the impact of their behaviour on the economic, social, and environmental sustainability [of the city]” (ER1, 16 December 2014). ER6 echoed this belief in the enlightenment function of education, a very non-coercive means of achieving policy change and an example of a secondary belief in ACF terms (ER6, 15 December 2014).

Other participants who promoted behavioural change were not so reluctant to exercise the coercive authority of government to achieve change, however, with ER4 arguing that if urban sustainability was to be achieved in Edmonton, city officials “should just wait opposition out” and pursue a pro-sustainability agenda regardless of opposition (ER4, 10 December 2014). Other participants were not necessarily so blunt in recommending decision makers dismiss opponents, but did argue in favour of using the city’s regulatory authority to develop sticks as well as carrots to shift behaviour towards more sustainable choices (ER2, 22 December 2014; ER7, 3 December 2014).

The sole participant to support technological solutions to the city’s sustainability issues was ER5, who based her support on a belief in technology’s ability to improve environmental quality while simultaneously insuring no reductions in human quality of life, and argued that local government could exercise control over technological adoption through regulatory mechanisms like local building codes, as well as their own purchasing choices (ER5, 23 December 2014).
9.2 The Creation of Policy in Edmonton

In this section, we will focus on building our understanding of policy-making and coalition-building in Edmonton by examining how actors coordinate and which resources they rely on to achieve their objectives. As in Saskatoon, while the informants consulted for this section provide solid detail on both, it is as difficult to make a case for the existence of advocacy coalitions here as it was during our review of events. The reality of policy-making in Edmonton appears to be a process controlled largely by elites, with little ongoing participation by outside actors. Even the participation of elites is somewhat sporadic – whether because of shifting priorities or sudden crises is impossible to say – suggesting that the policy subsystems covered here are immature.

9.2.1 Coordination in Edmonton

Of the eight interviewees from Edmonton, five provided examples of hard coordination between actors on urban sustainability. Overwhelmingly, these respondents claimed that hard coordination typically only occurred after municipal officials convened a temporary consultation and engagement process – such as that developed during the creation of The Way We Green – or after these same officials began a bilateral and issue-focused dialogue with an outside organization (ER1, 16 December 2014; ER2, 22 December 2014; ER3, 10 December 2014; ER5, 23 December 2014; ER6, 15 December 2014). Critically, this collection of participants includes actors from every role highlighted under the ACF, included elected and administrative officials, journalists, and NGO representatives. Accordingly, this point represents part of a shared understanding of how influence is wielded in Edmonton’s policy system. ER4 suggested that hard coordination between outside actors, independent
of government convening a forum in which they could do so, was an exception rather than a norm because issue-focused organizations had some “fear of losing [their] identity in something else” which prevented them from joint strategizing (ER4, 10 December 2014).

Several respondents offered examples and explanations as to why soft coordination is more common among Edmonton policy actors interested in urban sustainability. ER5 and ER8 both argued that outside groups were often poorly organized, heavily reliant on a limited number of volunteers, and vulnerable to the loss of critical grants, all contributing to a context in which little capacity was available for formal coordination with other groups (23 December 2014; 9 December 2014). ER1 also commented on the organizational sophistication of outside groups, claiming that their typical focus on a single issue encouraged their routine dissolution (16 December 2014). ER2 suggested that external advocates would achieve greater success if they were to frame their asks using the same language as decision makers, with ER1 expressly acknowledging that, as a policy maker, she was particularly influenced by evidence and proposals which assisted in her pursuit of constructing a “strong, healthy, active, engage society…anything that helps promote a welcoming, inclusive city for people…that motivates me to take action and promote it” (ER1, 16 December 2014; ER2, 22 December 2014).

The thinness of participants’ comments on coordination between policy advocates focused on urban sustainability is, thankfully, explicable via reference to these same participants. A surprising five of eight interviewees could not name any organization whose primary interest was encouraging sustainability at the municipal level in Edmonton, casting serious doubt on the existence of both sustainability-focused advocacy coalitions, as well as an urban sustainability policy subsystem in Edmonton (ER1, 16 December 2014; ER2, 22 December 2014; ER5, 23 December 2014; ER6, 15 December 2014). ER8’s comments on this finding can stand in for those of her colleagues; “I can’t think of a group that I would call to talk to an expert on urban sustainability issues in Edmonton, and
maybe there is such a group, but maybe they haven’t done enough to promote themselves” (9 December 2014).

9.2.2 Resources in Edmonton

In this collection of questions, respondents were asked to name the resources most helpful to groups interested in achieving policy change in Edmonton and, separately, which resources advocates of urban sustainability most frequently relied upon. By doing so, we wind up with some understanding of the gap between what are believed to be effective levers of change, and what levers are actually employed in advocacy efforts.

The most commonly named resource was the support of councillors, with four of the eight participants suggesting that any group with an interest in influencing policy decisions in the city needed to cultivate positive relationships with a variety of council members (ER2, 22 December 2014; ER3, 10 December 2014; ER4, 10 December 2014; ER6, 15 December 2014). ER4 explained that this required that advocates “develop relationships with your councillors that aren’t accusatory, you need to be more convivial than that, and you have to be able to relate to them, also recognizing that they have a lot of constituents that don’t hold your world view,” revealing a bias towards civil engagement also discussed in Saskatoon (10 December 2014).

Public support was also identified as a potential resource to actors attempting to achieve policy change, with ER4 and others arguing that groups who could demonstrate their ask was desired by a large section of citizens were more likely to be successful; proving this public buy-in was possible via several mechanisms, including petitions, letter-writing campaigns, mass demonstrations, and the mobilization of supporters on social media (ER4, 10 December 2014; ER6, 15 December 2014; ER8, 9 December 2014). ER3 spoke to the effectiveness of this resource, suggesting that “Edmonton is
actually reasonably good at listening to certain interest groups when they can demonstrate that they have larger support” (10 December 2014).

Cash was a resource identified by only three interviewees, with ER2 claiming that decision makers could be motivated to implement policies when the external advocate pushing for them could supply the required funds (22 December 2014). ER8 argued that the only outside groups who routinely had cash available to use in policy advocacy were property developers, and that these actors were not typically interested in urban sustainability issues; on this claim, ER8 was supported by ER6, who went further by suggesting that developers were among the few consistent opponents of pro-sustainability measures (9 December 2014; 15 December 2014). That such an obvious resource was rarely identified by respondents reinforces comments shared earlier on the fragile organizational structure of many groups interested in promoting urban sustainability.

Formal data and technical reports were identified as potential assets by few respondents, and their actual use was suggested to be rare. ER2 and ER6 spoke specifically to the perceived capacity shortcomings of external organizations by recommending they partner with groups possessing excess research capacity, such as universities, when attempting to achieve policy change (22 December 2014; 15 December 2014). ER1 shared that outside organizations often “based their opinion or concern on unfounded reasons,” and did not draw heavily on empirical evidence (16 December 2014). That so few participants spoke of the importance or common use of formal data in policy debates around urban sustainability reinforces the implication drawn out at the close of the above section, namely that there may be no urban sustainability subsystem in Edmonton at all.

Finally, two interviewees suggested that policy stories were valuable resources, with stories implied to be a particular way of framing a policy issue so that facts, requests, and value claims were delivered in narrative form. ER5 argued that policy stories worked to motivate all actors in the policy process, and that advocates who were adept at telling stories of how their issue “might impact your kids
or your community…[would] tend to get a bit more attention” (23 December 2014). ER6 spoke more specifically to what motivated elected officials, explaining that:

“…members of council…are individuals as well and I think hearing what other, what people, what their experience is or how they see the world that we’re talking about is very influential for the elected people at the municipal level, it’s like hearing from your neighbours on what’s happening." (15 December 2014)

9.3 Sustainability Narratives in Edmonton

As with the equivalent section above, competing narratives around sustainability will be constructed here using the positions staked out by policy advocates. Thoughtful construction of stories can be an aid to achieving policy change, and presents an opportunity for the policy analyst to produce work of practical value.

9.3.1 Pro-Sustainability Heroes, Victims, and Villains in Edmonton

In Edmonton, there are three groups of actors who can be categorized as heroes in the narrative sense. First are the elected officials who work to turn pro-sustainability initiatives into revenue-generating activities for the City, transforming the pursuit of sustainability from a cost into a benefit. These officials work against entrenched opinions regarding what counts as a legitimate activity for the City, and push both bureaucracy and citizenry to accept a more entrepreneurial approach to local government. At the same time, these officials stress that these new, entrepreneurial activities also serve to meet municipal goals around keeping property taxes low, and employment and population growth high. Objectives are being added to the City’s list of priorities, not replaced.
The second category of hero in Edmonton’s pro-sustainability narrative are the citizens who support spending municipal tax dollars on protecting the environment though capital projects like the co-composter and the programming it entails. These projects represent new, ongoing costs to citizens, costs which they are under no obligation to take on. As in Saskatoon, it is the absence of coercion that makes the citizen choice to support and participate in sustainability programming a heroic one.

Prudence can also motivate the resident; by supporting sustainability initiatives today, they help the City avoid larger costs in the future, such as landfill replacement. Still, support based on prudence is not based on coercion, meaning it is still heroic.

The final collection of heroic actors in Edmonton’s pro-sustainability narratives are civil servants working to improve the City’s public transportation system through programming redesign and securing new federal investment. What qualifies them as heroes is their sustained commitment to transit, not just as a core service, but as a core system around which other civic systems ought to be organized. For example, new subdivisions and infill projects ought to be designed around ensuring high transit ridership, rather than waiting for projects to populate before bringing in transit service. In addition, civil servants are among the most consistent in working to persuade others that transit improvements are critical for the long-term sustainability of the city. That political considerations sometimes produce transit system outcomes which are less than ideal for sustainability does not erode their commitment, and it is this sustained commitment over time which qualifies civil servants as heroes in pro-sustainability narratives.

There are few villains identified with any consistency in Edmonton’s pro-sustainability narratives. The sole notable collection of actors were the ‘nostalgic luddites’ who argued in favour of maintaining – and even expanding – the City’s fleet of aging trolley buses. This position was maintained in the face of considerable evidence regarding their shortcomings, such as maintenance costs and GHG profile. This group counts as villains because of their opposition to the expansion of the
city’s bus transit system, but again, their overall narrative importance is slight because of how they were tied to a single issue, and dissolved as a collective after the issue was closed.

The list of potential victims in Edmonton’s pro-sustainability narrative is slightly more populated. First are city residents, who will be forced to pay the financial costs of replacing the landfill if the City isn’t proactive about improving sustainability through recycling and composting. The capital cost of this project would be considerable, as would the political difficulty of negotiating with the local governments surrounding Edmonton; every minute and dollar spent on such a project would mean fewer resources for other City projects. Residents were also potential victims of the pro-trolley collective described above, as they would be made to pay for a demonstrably inferior service.

The second potential victim in the pro-sustainability narrative is the City itself, who would be the victim of a missed opportunity if they failed to borrow while interest rates were at historic lows. Sustainability initiatives sometimes require considerable up-front funding, while the benefits are typically realized in the future. Deferring the cost means deferring the benefits, while potentially locking the City into an unsustainable future. Waiting for the priorities of higher orders of government to come into alignment with the City’s is a risky tack for the same reason. Therefore, borrowing to start projects – such as LRT expansion – is justifiable.

9.3.2 Pro-Sustainability Scenarios and Arguments in Edmonton

A significant number of pro-sustainability scenarios and argument exist in Edmonton. For clarity’s sake, they will be organized into several collections of overarching concerns. Those that focus on establishing the legitimacy of sustainability as an objective of municipal government, those that emphasize the need for the City to be proactive in implementing sustainability initiatives, and a third, residual category of noteworthy stories.
The first collection of scenarios and arguments aim to persuade that achieving sustainability is a legitimate objective of local government, and spending the City’s limited resources on doing so is justifiable. For example, investing in waste diversion and composting helps protect the local environment, which is a legitimate municipal objective, so capital projects like the composter and programs like curbside collection of recycling are a proper use of revenue. The legitimacy of sustainability as an objective is also buttressed by the fact pursuing it helps achieve other City goals around growth of population and economic activity; sustainability initiatives – like expansion of the LRT – make Edmonton a more livable city, meaning it is also more desirable to live, work, and invest in Edmonton.

The ‘sustainability is a legitimate goal’ argument also provides guidance for choices on programmatic design by raising the objective’s relative priority, compared to the other objectives mentioned above. In short, the City is justified in making decisions which entail trade-offs in favour of sustainability. For example, Edmonton will get more benefit from its public transit system by setting routes to maximize ridership rather than coverage; therefore, it is acceptable to have significant differences in service levels across neighbourhoods. The trade-off here is between sustainability and equity of access to services, with sustainability coming out as the winner. Another example; as reducing emissions from transportation is a priority for the City, dollars should go towards the LRT and not the BRT system.

Finally, the legitimacy argument provides a rationale for exercising the City’s coercive power to induce behavioural change. As investments in sustainability must be made today, but the benefits enjoyed many tomorrows from now, enlightened self-interest through education cannot suffice as a sole motivator driving citizen participation in sustainability initiatives. Because sustainability is a legitimate objective, the City is justified in using its coercive power to penalize laggards and reward leaders in behavioural change through program design, such as in the shift to user-pay waste collection services.
A related point in this argument claims individuals will make sustainable choices where this choice is as convenient as the unsustainable status quo; accordingly, the City needs to make sustainable behaviour more convenient, and one acceptable way to do so is by making unsustainable behaviour increasingly inconvenient through initiatives like user-pay and time-of-day roadway pricing.

The second collection of pro-sustainability arguments and scenarios are related based on their position that the City ought to be proactive in addressing sustainability issues, and not wait for other orders of government to become involved. As an example, pro-sustainability advocates build stories around this point when making claims about how the City sends too much waste to the landfill, and that replacing this facility prohibitively costly, politically and financially. Being proactive means making investments in waste diversion, process innovation, and product design, such as curbside recycling, composting, and ‘garbage university’.

Another example of the sustainability-requires-proactivity theme can be found in arguments around land use. Edmonton’s footprint has sprawled, and infrastructure maintenance costs have risen, because the City’s public transit system is inadequate. Investing in LRT and BRT would improve ridership, increase urban density, and reduce the cost of maintaining roads and water lines. However, the provincial and federal governments cannot be relied upon to have the same list of priorities, and the same timelines, as Edmonton’s local government, so the City ought to be proactive and take advantage of low interest rates and start borrowing to fund these investments. Choosing to wait means missing this opportunity, and locking Edmonton into an unsustainable patter of development.

The final example to be offered in this collection is succinct, but widespread, and not found in Saskatoon. It begins by acknowledging that the City of Edmonton has limited sources of revenue, and it is difficult to draw more heavily on these existing sources. Sustainability initiatives represent an opportunity for local government to create new lines of business which are revenue-positive, such as product and training program development at ‘garbage university’. These new sources of revenue
would help Edmonton meet the challenges of sustained population growth without making the city a less affordable place to live by increasing tax and service fees, meaning the City ought to be proactive and engage in some civic entrepreneurialism.

9.3.3 Anti-Sustainability Heroes, Victims, and Villains in Edmonton

Unlike their pro-sustainability rivals, the anti-sustainability coalition names no heroes or villains in their stories, only a single collection of potential victims. The group is made up of Edmonton’s residents, with some degree of differentiation based upon the specific story being told. The first distinct group are the city’s lower-income households, who will be particularly victimized by sustainability initiatives which increase the cost of living in Edmonton as they have the lowest ability to pay. Residents in general may also become victims of pro-sustainability policy actors whose failed economic development schemes, such as ‘garbage university’, increase the City’s capital and operation costs while not producing the promised revenue. Residents will also pay the interest cost associated with money borrowed for sustainability initiatives like LRT expansion, costs which could be mitigated by waiting for federal and provincial dollars to be made available.

This residents-as-victims category is occasionally made more granular by anti-sustainability policy advocates by emphasizing the time lag between costs and benefits of sustainability initiatives; the costs are in increased taxes and disruption of daily life, as projects like the LRT are built, costs which are bourn by Edmonton’s residents today. The benefits will only be enjoyed by future residents, if they manifest at all. Emphasis is also sometimes placed on the disruption of these initiatives, disruption which victimizes residents by changing the character of their neighbourhood and taking away road space from their vehicles, thus increasing overall congestion.
9.3.4 Anti-Sustainability Scenarios and Arguments in Edmonton

As in the Saskatoon section, Edmonton’s anti-sustainability policy advocates are responsible for only a few scenarios and arguments, the common thread linking the few that exist being the rejection of sustainability as a priority objective for the City. Instead, primacy is placed on more traditional concerns, such as the financial health of the city. In this argument, the stability of the city’s local government is partly due to its no-borrowing policy, and the harms of ending this policy would outweigh the benefits of the sustainability projects it would finance. Therefore, the City ought to only pursue projects which other orders of government are prepared to directly support, and avoid borrowing altogether.

A second example of anti-sustainability advocates placing priority on other objectives also comes from stories told around transit expansion. Here, sustainability initiatives ought to be rejected because the primary purpose of city streets is to provide passage for cars, not public transit vehicles. This means investments like street redesigns and system expansions are unjustifiable, specifically where they would require taking traffic lanes away from cars.

10. Discussion

We will begin with this project’s first research question. Do sustainability-focused advocacy coalitions exist in municipal settings? The straightforward answer to this question is no. Understanding why is worthwhile, as the simple answer is silent on whether the ACF is an inappropriate framework to apply at the civic level, if the sustainability policy subsystem is nascent – and thus unfertile ground for coalitions – or whether this study is missing information critical to identifying the presence of coalitions.
Conflict between policy actors is critical to identifying coalitional boundaries. Obvious conflict over policy objectives, instrument settings, or legitimacy of activity present an opportunity to observe the ACF’s different levels of belief in action. Conflict is also an opportunity for actors to learn the identity of their allies and opponents, organize into opposing camps, develop strategies, and pursue shared objectives around policy outcomes. Absent conflict, this shared sense of identity and agenda will not form, and neither will an advocacy coalition. In both Saskatoon and Edmonton, conflict over sustainability-focused initiatives typically lacked the intensity required to provoke sustained coordination between policy actors. Frequently, the ACF-based discussions of events offered above noted that drawing lines between competing coalitional camps was difficult because of a lack of sustained conflict. Occasionally, conflict would sharply intensify, and actors would collect themselves into distinct groups. These periods were infrequent, however, and sustained only so long as the issue which provoked the conflict remained open. Issues closure meant the end of coordinated activity, and this on-again, off-again coming together of policy actors meant the coalitional glue of shared beliefs never developed.

Coordination, as was discussed earlier, is often neglected in ACF-based studies. Observing coordination is difficult when content analysis is the primary method of collecting data, and when interviewees fail to recall or decline to disclose relationships with other policy actors. Sustained coordination, particularly of the hard variety, is of special importance to the development of a coalition because it is in these exchanges that shared beliefs and agendas develop. In Saskatoon and Edmonton, soft coordination was readily observable across a wide range of actors. Elected officials, journalists, academics, community-based organizations and activists all shared language around the framing of problems, solutions, and beliefs, occasionally in direct support of another actor’s objectives.

Hard coordination, however, was quite uncommon, with only a few clear – and meaningful, in terms of their impact on policy outputs – examples appearing in both cities. While reviewing local
media may not have been the line of inquiry to follow in uncovering these arrangements, interviews could reasonably have been expected to deliver such information; here, however, several interviewees made sure to stress that their relationships with other organizations and actors were typically arms-length, and rarely if ever involved significant sharing of resources or devising of shared strategy. Consequently, significant and lasting bonds did not develop between any of the organizations or individual actors highlighted as proponents of sustainability in either city.

Expressions of deep core, policy core, and secondary beliefs were far easier to find, in-line with the expectations set by previous ACF-based studies of policy development. Deep core beliefs included perspectives on the relationship between humans and nature, the primary purpose of government, and the ultimate basis of society’s prosperity and stability. In a break from Sabatier, this study has been comfortable using document and interview analysis to label some actors positions as representative of deep core beliefs, primarily because of the consistency with which actors participated in the sustainability policy subsystem. In both cities, many actors participated over the entire 2002-2012 period, making repeated statements on issues relevant to urban sustainability and, on occasion, speaking quite openly about how their position was related to their core ideas of how human life ought to be organized. This type of data is not a substitute for longitudinal analysis of deep core beliefs, but is certainly of value to the researcher who is interested in a subject and context for which such data sets are not available because they were never collected. Policy core beliefs were also readily observable, again owing largely to the stability of the cast of characters who participated in policy discussions over this time.

Divisions between actors over beliefs were also visible. For example, one group believed that convincing individuals and collectives to work towards sustainability require the city to exercise its legitimate powers of coercion, though instruments like congestions charges and usage-based waste collection fees. Their opponents believed that a constituency supportive of pro-sustainability initiatives
would come together without coercion – following efforts at public education around the impact of certain consumptive and policy choices – because of the instinctive concern citizens have for protecting the natural environment. A second example was between those who believe that cities have become excessively car-oriented, and that local governments need to use their power to redesign existing neighbourhoods and aggressively plan new ones. Their opponents believed that personal autos will and ought to remain the primary mode of transportation, and that money directed to mass transit or alternative transportation infrastructure are unnecessary subsidies provided to a noisy minority.

These, however, are beliefs expressed by individuals, when what we are interested in are coalitional beliefs. It is difficult to define an inventory of beliefs which set a boundary between a pro- and anti-sustainability coalition because the potential members of each group cooperated so infrequently, and so softly. Also, at several points in each case we saw policy actors drift from one prospective coalition to another. This may speak to the nature of policy making at the municipal level, where there are few supra-organizing influences like political parties keeping individual actors focused on working together against a clearly identified opponent. It may also owe to the seemingly ephemeral nature of many organizations primarily focused on urban sustainability in our case cities, groups which coalesce and dissolve over concerns with single issues rather than systemic processes. Finally, it may be that the news media’s preoccupation with individual actors rather than collections of actors prevented this project from understanding the complete coalitional landscape of each city.

Now we can move to our second research question, namely how do sustainability-focused advocacy coalitions compete in municipal settings to enshrine their preferences in policy outcomes? The first notable recurring strategy seemed to be co-optation of the nascent or junior coalition – which was typically more interested in seeing sustainability initiatives implemented – by the senior coalition. Co-optation often took the form of small concessions made to the nascent group, potentially to prevent the coalescing of a broader interest group. Examples abound in the transit stories of each city, typically
in regard to increasing the infrastructure available to non-motorized users. In Saskatoon, the City adopted several alternative transportation plans over the periods discussed, but only allocated a token amount of money to implement what would have been expensive undertakings.

Co-optation segues into a related observation, namely that actors pushing for changes to the status quo typically held roles further from real power in the policy making process. Columnists and activists could routinely be counted on to promote pro-sustainability initiatives and beliefs, while elected officials were more consistently supportive of maintaining the status quo. Again, this comment is most clearly related to the transit stories of each city, where actors who promoted the ‘transit is subsidized’ argument were often elected officials, while the ‘design for people, not cars’ proponents were often outside formal decision-making forums. Civil servants floated between the two arguments, with ready examples in each city. This observation also holds with the waste story followed in Saskatoon, where for the bulk of the period discussed, status quo actors controlled most elected positions. It breaks down, however, when applied to the waste story in Edmonton, where elected officials and civil servants were the most active in promoting pro-sustainability initiatives; crucially, this promotion came along with a framing of the initiatives as an opportunity for the City of Edmonton to develop a new line of revenue.

In each city, the most common form of cooperation between actors was soft coordination, specifically in the shape of one actor recommending the policy proposals of another be implemented. This observation is justified by reference to the news media reviewed for this study; again, interviews could have revealed they were actually engaged in hard coordination, but participants were either unwilling to disclose close relationships or genuinely not participants in such. Assuming interviewees were being forthcoming, the implication that sustainability-focused coalitions are nascent – if extant at all – is reinforced.
Facts, data, trends and forecasts were all employed as resources by various actors in each city, but with two caveats. First, arguments in each city did not appear to be propelled by disagreement over facts, but disagreements over beliefs regarding what lines of service the city ought to deliver. Second, there was little convergence across, or even within, coalitions of what exactly the facts were. An example of the first claim comes from the waste story in Saskatoon, where those opposed to expanding municipal recycling services did so without directly responding to their opponent’s claims that the landfill would be at capacity soon, and that replacing it would be politically and financially difficult. An instance of the second comes from the same story; multiple actors used facts to describe the landfill replacement problem – the aim being to promote expansion of recycling programs – but there was no agreement on the remaining operational life of the landfill, or even the city’s current waste diversion rate. This observation reinforces the claim made above that soft coordination was the norm; hard coordination would have produced agreement on a core set of facts, which then could have been incorporated into a coalitional message or narrative. Another way to interpret this confusion over facts is by referring to the amount and quality of data publicly reported by the City and outside organizations. With so few external groups monitoring municipal activities, and the relative inaccessibility of City-directed monitoring and evaluation materials, conditions were poor for shared understanding of problem.

Coalitional actors also attempted to take advantage of significant events to shift problem framings and entrench their policy preferences. Examples can be found in both cities, with elected officials in Edmonton turning the purchase of the co-composter into an opportunity to build an entirely new line of revenue for the City, via the development of ‘garbage university.’ Civil servants in Saskatoon used the success of the UPASS referendum as justification to begin targeting specific populations with rider-capture initiatives, like service agreements with high schools and businesses in the city’s north industrial area. These activities prepared the ground for the administration’s gradual
shift towards and intensity-based model of transit service, rather than the traditional coverage model. These are examples of behaviour expected by the ACF, where nascent coalitions exploit changes in typically stable subsystem parameters to displace their opponents from control over policy.

The final resource which deserves emphasis is people. Specifically, those few actors who routinely expressed pro-sustainability policy preferences, and did so with substantive consistency. These actors included journalists like Gerry Klein, Charlie Clark, and Councillor Paulsen in Saskatoon, and Mayor Smith, Mayor Mandel, and Councillor Iveson in Edmonton. These individuals served as the intellectual and advocacy core of the nascent sustainability coalitions in each city, and used their positions of influence to draw attention to the proposals of organizations with lower profiles. They were also responsible for keeping pro-sustainability narratives and problem framings in public view, and under discussion in council chambers. It may seem trite to claim ‘people matter’ as a meaningful observation, but it does need to be stressed that absent the participation of committed, consistent, higher-profile policy actors, a collation has no practical nucleus to form around.

Our final research question is how can narratives, as a coalition resource, help explain the success or failure of advocacy coalitions in achieving their preferred policy outputs? One clear similarity between Edmonton and Saskatoon was in how incomplete the stories offered by anti-sustainability forces were, and how few they were in number. Saskatoon’s identified few heroes, villains, and victims, and their narrative was routinely about how maintaining the status quo would be less costly than working towards sustainability. Their stories were not particularly inclusive – in that they identified a clear collection of actors and the enmity or common interests connecting them – or action-oriented; anti-sustainability stories in Saskatoon were not about building anything like an alternative policy output, such as a new landfill or wider roads for cars, they were strictly about maintaining the procedural and material status-quo of the city. Accordingly, anti-sustainability stories
in Saskatoon attracted no new supporters and did not build a constituency eager to enjoy the fruits of the narrative’s success.

These same comments apply to Edmonton, where the range of actors and scenarios was even more truncated. Anti-sustainability stories in Alberta’s capital identified no heroes or villains, only victims. This incomplete narrative structure means agency was not placed with any group or individual; this story did not tell anyone ‘this is your enemy, and you are the one to stop them.’ Furthermore, the strongest anti-sustainability story was based on the argument that protecting the financial health of the City and pursuing sustainability were incompatible activities. This narrative was countered directly by the pro-sustainability story of the revenue which could be produced by implanting the recommended programs. Subscribing to the anti-sustainability narrative would mean continuing to rely on property taxes, consequently committing the City to future increases; no wonder this narrative failed to attract much of a following.

In comparison, pro-sustainability stories in each city typically feature a more complete cast of characters, as well as a broader range of scenarios and arguments. In Saskatoon, heroes, villains, and victims were all identified; while victims were often the most developed class, and actors often occupied all three roles at the same time, pro-sustainability narratives in this city were still better designed to identify who played what role in the policy controversies discussed. This matters because the role of an actor also assigns a degree of agency, or its absence; heroes can work for policy change, victims can – with the aid of heroes – become a politically active constituency agitating for change and providing heroes with some of the required resources. Pro-sustainability scenarios and arguments were also more varied than their opposition, with some emphasizing more passive sustainability initiatives and others more direct and coercive actions. Consequently, actors of different ideological persuasions could see themselves fitting into one or more of the pro-sustainability stories in Saskatoon.
Edmonton’s pro-sustainability stories also featured a wider range of actors, though not a complete range. Heroes and victims were present, but typically no villains. Deliberate or not, this narrative form meant no constituency was primed to oppose pro-sustainability initiatives in a sustained and vigorous fashion; no interest, organization, or individual was told they were the bad guys. Edmonton’s pro-sustainability scenarios and arguments were also more extensive, with stories in Edmonton stressing the need for the city to be proactive, the possibility of generating revenue through sustainability, the legitimacy of sustainability as a municipal objective, and the right of the City to use its coercive power to drive behavioural change in pursuit of sustainability. Many of these stories were unique to Edmonton, and this narrative advantage may explain why Edmonton did more to advance sustainability in the study period than Saskatoon.

From this study, we can say stories matter in achieving policy outputs where those stories feature a complete – or mostly complete – cast of characters who hold unambiguous roles as heroes, villains, or victims. The successful scenario or argument driving the narrative ought to be positive in tone, stress what the story will achieve, provide, or deliver, rather than concentrate only on what will be preserved or avoided. Narrative opposition can be overcome by building multiple complementary stories which allow for various constituencies to see themselves as heroes or victims, but not villains. Reiteration is key, as stories need to be told again and again if they are to become embedded in political discourse.

### 10.2 Alternative Explanations

Given that the ACF has provided an incomplete understanding of policy making at the municipal level, are there other theoretical traditions in public policy that may shed light on these events? Here two analytical approaches will be followed, one drawn from Stone’s *Policy Paradox* and the other from Hajer’s *Politics of Environmental Discourse*. 

124
In Stone’s view, “public policy is about communities trying to achieve something as communities” (2011, p. 18), and understanding the processes by which they make these efforts requires the analyst bring models of reasoning, society, and policy making to their work. The primary shortcoming of what she names the ‘rationality project’ - a suite of mainstream analytical models that attempt to explain away the role of politics in policy processes - is its lack of awareness of its own political, values-driven character. To Stone, policy analysis is “strategically crafted argument, designed to create ambiguities and paradoxes and to resolve them in a particular direction” (2011, p. 8), and critically, that these arguments are offered by individuals embedded in relationships of accountability and authority within a network of actors. Policy proposals are developed to solve problems, but they are also about purposefully cultivating these relationships so that a particular shape of network is created, one that can realize its preferences in policy on an ongoing basis. Accordingly, Stone advises us to not accept the goals, problems, and solutions embedded in policy proposals as apolitical, but to interrogate them in order to understand how politics creates policy. For example, one broad category of policy goals is efficacy, or getting your moneys’ worth. An analytical approach that respected the role of politics in decision making around policy would ask, among others, the following questions (2011, p. 65):

- Who determines what is the correct output goal, or objective of a program?
- How should we value and compare multiple objectives?
- How do different objectives or outputs benefit different constituencies or groups?
- How should we decide which of the many benefits/outputs of any input to count in the equation?
- How should we count the virtually unlimited opportunity costs of resources used as inputs?

In both Saskatoon and Edmonton, the ‘correct’ output goal was established through repeated interactions of council, administration, and, less frequently, outside actors such as journalists and NGOs. The ‘who’ were formal, institutionally-situated actors, suggesting policy making in both cities
is largely an elite-driven process, an interesting finding given the relative oneness of municipal political systems. Objectives were compared largely in terms of their contribution to the continued financial health of the city, with immediate costs often valued more highly than future savings, as typified by the protracted and unfruitful debate over volume-based garbage collection in Edmonton. Benefits could usually be expected to flow primarily to future residents of both cities - e.g., designing and implementing a BRT network in Saskatoon would take several years, and several more for commercial and residential developments to spring up along its routes - but, interestingly, these benefits were often discussed without reference to their delayed character. Deciding which benefits counted was again largely driven by their dollar value to the corporate city - further strengthening municipal financial health as the main value driving municipal policy making - and there was little consideration given to how dedicating resources to any one output would preclude pursuing a different one.

Here, we see that answering Stone’s questions has given us an idea of which actors are the most significant in municipal policy making and what are the main value considerations driving decision making. Stone offers many other similar questions relevant to the various goals, problems, and solutions offered by policy advocates, but the answers we can develop to these questions offer a static understanding of policy making, relevant only to a given moment in time and offering no guide to predicting why and when values will shift and the answers change. At the same time, Stone’s approach recognizes the critical role of values and politics to decision making, ties those values to specific actors and their institutional role, and also avoids the ACF’s reliance on advocacy coalitions. Further study of municipal policy making from an approach based on Stone’s work may be a fruitful endeavour.

A second analytical approach is offered by Hajer’s discourse coalitions, “defined as (1) a set of story-lines; (2) the actors who utter these story-lines; and (3) the practices in which this discursive activity is based” (1995, p. 64-65). Discourse itself is the “specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and
through which meaning is given to physical and social realities” (1995, p. 44). Discourse is produced and reproduced by individuals, but within a context of institutions that both constrain and enable the amount of agency they enjoy. Discourse has boundaries, whether jurisdictional, professional, or normative. New discourses subvert these boundaries by developing their credibility, the acceptability of the discourse and the trust others have in the discursive agents, “and thus create space for the formation of new, unexpected political coalitions” (1995, p. 59). Hajer is concerned with two characteristics of a discourse: structuration, where policy actors are only credible if they use the ideas, concepts, and categories of a given discourse, and institutionalization, where a discourse is translated into policy. The questions for our cities become does a discourse of sustainability exist, is it structured, and is it institutionalized?

Clearly, there are numerous sustainability story-lines in each city. Acceptability is cultivated by ensuring these story-lines speak to how the corporate city can achieve other goals while implementing pro-sustainability policy, particularly fiscal stability. Stories-lines with less acceptability - characterized by the more narrow range of actors who use them - feature ideas about ecocentric values and ending material growth’s role as society’s primary objective. In Saskatoon, the structurated sustainability discourse includes language about cost avoidance and improving quality of life, while also facilitating the city’s continued population growth. The actors who reproduce this discourse, primarily members of council and administration, are clearly embedded within institutions, and they reproduce this discourse in order to build the public’s trust in their policy prescriptions. As the makeup of council changed, this discourse became reproduced more frequently, and eventually pro-sustainability policy like curbside recycling was implemented. At this point, we can argue discourse institutionalization has occurred. Alternative sustainability story-lines, such as those offered by the city’s environmental activists and journalists, failed to cultivate enough credibility, acceptability, and trust to advance this policy agenda
even further, but given Hajer’s acknowledgement of the role institutions change, his approach does not produce as static an understanding of the policy process as Stone’s.

Turning to Edmonton, the acceptable sustainability discourses include reference to developing new lines of revenue, arguments that pursuing sustainability is a legitimate goal and activity of municipal government, and claims that implementing pro-sustainability policy – such as expanding the LRT and moving to volume-based fees for waste collection - will aid in achieving other municipal objectives, such as increasing population density and reducing the amount of material sent to the landfill. These discursive points were reproduced by a range of elected and administrative officials over the period examined, and this stability in story-lines suggests we are looking at a structurated discourse. However, it is more difficult to label these stories as representing an institutionalized discourse; recall that this concept refers to the discourse’s influence over policy outputs, and in Edmonton the success of these narratives in provoking policy change is somewhat uneven. Big shifts did occur, such as Edmonton’s purchase of the co-composter and development of the Edmonton Waste Management Centre of Excellence. However, BRT was introduced, dropped, and re-introduced to the policy agenda several times in this period, as was user-pay waste collection. Therefore, we can speak here of a tentatively institutionalized discourse, one with some influence over policy but not one that guides policy making across government.

Hajer’s discourse coalitions approach appears to provide an analysis that more closely matches the reality of policy making in the case cities. Story-lines are obvious, they are consistently reproduced by a relatively stable set of actors, and these actors occupy formal decision-making spaces. In Saskatoon’s case, we have a clear example of how one discourse supplants another; discursive actors in positions of power are replaced over time, shifting the balance of power between discourses and providing opportunities for subordinate discourses to become institutionalized in power. Hajer’s approach is similar to Sabatier’s in its emphasis of the role of ideas in policy making, but dissimilar in
its lack of a granular operationalization of cooperation and emphasis on the critical role cooperation plays in building coalitions. Hajer’s framework also more closely matches interviewees accounts of the positive value of stories in policy making, and the influence those stories have over their own decision making. Looking for discourse coalitions, discourse structuration, and discourse institutionalization may be a more fruitful approach to studying policy-making in other Canadian cities than searching for nascent advocacy coalitions.

11. Conclusion

This study has focused on developing an understanding of how policy gets made in two Canadian cities, how actors come to operationalize the concept of sustainability, and the role of narratives in driving or delaying policy change. The Advocacy Coalition Framework has proven a useful guide to developing his understanding, even while thick description of events and numerous personal interviews failed to uncover clear evidence of mature advocacy coalitions in either city. At best, applying the ACF has uncovered evidence of nascent advocacy coalitions in each city, collections of policy advocates with many shared beliefs but only slight commitment to hard coordination. The range of actors promoting these beliefs is relatively narrow in each city, with membership predominantly drawn from the elected and administrative groups, another finding that suggests against the existence of mature advocacy coalitions in Saskatoon and Edmonton.

The absence of mature advocacy coalitions may be due to the relative youth of sustainability as an issue, to a gap between the ACF’s understanding of policy making and how policy is actually created at the municipal level, or to a failure to collect enough of the right data. The relative ubiquity of soft coordination is an insufficient justification for making a claim that advocacy coalitions do exist in this policy space. Relaxing Sabatier’s original criterion and accepting that soft coordination between actors sharing some beliefs in common is evidence for an advocacy coalition stretches the advocacy
coalition framework the point where it becomes a descriptive rather than an analytical tool. Nonetheless, since advocacy coalitions clearly do not spring fully formed in the absence of agency by policy actors, we must also accept that our data may provide evidence of a work in progress that, over a longer period than this study was able to track, could result in a mature coalition of the kind that meets Sabatier’s original definition.

Why might mature advocacy coalitions take longer to coalesce in municipal politics? The absence - possibly even normative aversion - to conflict over policy in each city could inhibit the creation of advocacy coalitions in that clear boundaries between allies and opponents were not drawn. This lack of conflict may be attributed to the non-partisan tradition of politics in Canadian cities, where political parties are rare and the structure of decision-making is such that alliances shift according to what is being decided, or what council is voting on (Lightbody, 2006).

Regardless of the reason, or combination of reasons, for failing to discover mature coalitions operating in either city, applying the ACF to these cases was still a useful exercise. Negative findings with respect to the applicability of a theoretical framework are still findings, and knowing that policy-making at the municipal level is not best-understood by applying the ACF can direct future empirical research and theory building. Such work may focus more on understanding how and why policy learning occurs among elected officials and elites, such as high-level civil servants, than among activists and interest groups. In both cities, these elite groups of actors exercised greater control over policy processes and outputs, and were largely unchallenged in their control. Given the openness of the municipal policy system - in that decision-makers and the venues they work in are relatively open to non-elites - how does the practice of centralized policy-making persist? Significant policy change certainly occurred in Saskatoon and Edmonton during the study period, but the ACF provides an inadequate understanding of why it did so. Filling this gap is an opportunity for future work, work that could benefit from applying Hajer’s approach to studying discourse coalitions rather than the ACF.
A second original contribution of this study is its formalization and application of the concept of narrative as a resource under the ACF. To this point, no study has attempted to incorporate policy stories into analysis, and the value of the approach is demonstrated by how they serve to simplify debates and facilitate issue closure. In addition, numerous informants stressed the personal and political importance of stories; policy change at the municipal level could not be driven by technical discussions alone, but needed to be wedded to a clear and concise tale of the importance of action, a tale delivered in a format familiar to the intended audience. The ubiquity of narrative as an entertaining tool of education means it can be used to build acceptance of change across a wide swath of potential supporters. In ACF terms, narratives are valuable because they activate a coalition’s mobilizable troops, and this study has demonstrated policy advocates recognize this possibility. At the same time, the study has found actors often do not approach the development of narrative in a systematic fashion. Narrative roles - our victims, villains, and heroes - were often missing members, which was reflected in some of the cases’ more incomplete and unsuccessful policy narratives. Further development and application of this approach is well-warranted, both as an academic exercise and an applied analytical service.

The third original contribution of this study is its codebook. This is a methodological and analytical aid which can be applied across studies, and could aid in bringing a degree of standardization and replicability to studies of sustainability, across orders of government and issue spaces. This contribution bears stressing, as to this point studies of sustainability have been too reliant on idiosyncratic definitions of sustainability which fail to recognize the tensions and debates within the broader literature. This said, academic constructions of sustainability have been found to be an imperfect fit to the definitions developed by policy makers and advocates. Elements from both strong and weak variants of the concept were present in the values and beliefs espoused by actors, an amalgam of perspectives not reflected in the conceptual purity of scholarly work. The codebook approach is also a systematic way to develop ACF-based studies which rely on content analysis following an event,
rather than being forced to rely on iterative surveys of the beliefs of policy makers. This latter approach, while emphasized by Sabatier, is impractical in many instances, not least the which is producing original research at the graduate level, and in the absence of long-term project support.

The implications of this study for the practical municipal politics and policy have been hinted at, but can be clearly stated. First, the relative completeness of a policy narrative seems to coincide with policy change. This suggests that policy advocates, from all possible roles in the policy space, should spend resources on crafting complete narratives. Explicitly defining a cast of characters, and clearly outlining the story’s arc, appears to be as important as ‘evidence’ - broadly understood - in achieving issue closure. This point was emphasized by study participants in both cities, and also appears to be demonstrated by the trajectory of policy change across the cases. At the municipal level specifically, this study suggests that one impediment to achieving policy change may be the absence of overarching coalitions organizers. While no such body was observed in either case, it may be that their absence was partly to blame for the failure of advocacy coalitions to coalesce and persist over time. A core group of committed individuals and organizations could serve as a coalitional catalyst by establishing the shared knowledge and beliefs required to develop a broader coalition. Such a group would also be better positioned to engage in hard coordination, a phenomenon obvious in its absence in both cities.

In sum, this study has made an original contribution to research on policy change at the municipal level in Canada, identified potential direction for future research focused on the same order of government, developed a methodological and analytic tool to understand sustainability narratives, which can be transferred to other studies on other issues, and generated a series of recommendations to policy advocates about how to use political stories to bring about policy change.
12. Bibliography


Atchison, Don; Clark, Charlie; Dubois, Bev; Heidt, Myles. “Saskatoon’s urban evolution.” *Saskatoon Star-Phoenix*, 12 March 2009, A15.


Bernhardt, Darren; Warick, Jason. “Four new faces on council; Hnatyshyn, Birkmaier defeated; Pringle, Lorje join city team.” *Saskatoon Star-Phoenix*, 26 October 2006, A3.


Coolican, Lori. “Proposed trash plan encourages recycling; But residents would have to pay garbage collection fee.” *Saskatoon Star-Phoenix*, 31 October 2007, A3.

Coolican, Lori. “Saskatoon Transit asks for fare hike: Ridership would suffer, according to report.” *Saskatoon Star-Phoenix*, 5 November 2005, A9.

Coolican, Lori. “Swystun hopes voters will ‘be bold’.” *Saskatoon Star-Phoenix*, 31 August 2006, A3.


Cooper, Dave. “City trash-to-ethanol plant gets final OK; Environmental permits clear way for construction to start this year at Clover Bar.” *Edmonton Journal*, 21 May 2009, F3.


Cooper, Jordon. “Vancouver’s showing the way.” *Saskatoon Star-Phoenix*, 13 August 2012, A8.


Gillis, James. “Ensure Cosmo staff remain in recycling.” *Saskatoon Star-Phoenix*, 10 September 2010, A15.


Gordon, Kent. “Edmonton homeowners making less garbage could pay lower fee; Plan aims for limit of three containers of trash per pickup cycle.” *Edmonton Journal*, 6 April 2011, A3.


Gordon, Kent. “Homeowners will pay more to get rid of waste; City utility budget includes increases in sewer, garbage fees.” *Edmonton Journal*, 6 December 2011, A1.


Gordon, Kent. “Sewer, garbage fees proposed to rise six per cent in 2011.” *Edmonton Journal*, 10 July 2010, B3.


Hutton, David. “‘Balanced’ city growth plan proposed; Focus on downtown.” *Saskatoon Star-Phoenix*, 27 January 2012, A3.
Hutton, David. “Bids to determine curbside recycling; City looking to tender program to private sector.” *Saskatoon Star-Phoenix*, 14 January 2011, A1.


Hutton, David. “Blueprint plans city growth; City has space for 500,000.” *Saskatoon Star-Phoenix*, 25 January 2012, A1.

Hutton, David. “Bus fare increases reduce tax hike as budget passes; Measures will boost revenue by $732,000.” *Saskatoon Star-Phoenix*, 8 December 2011, A3.


Hutton, David. “City switches traffic gears; Rapid transit plans to compete with car.” *Saskatoon Star-Phoenix*, 16 March 2012, A1.


Hutton, David. “City to seek feedback on curbside recycling.” *Saskatoon Star-Phoenix*, 27 February 2010, A3.


Hutton, David. “Firms split on recycling options; Curbside backed, but debate heated whether homeowners should sort.” *Saskatoon Star-Phoenix*, 7 September 2010, A3.

Hutton, David. “First voices heard in Saskatoon Speaks; About 250 people take part in first day of city summit.” *Saskatoon Star-Phoenix*, 2 October 2010, A12.


Hutton, David. “Let’s envision a better city’; The StarPhoenix has recruited 16 community bloggers to start the debate on how to make Saskatoon a more livable city over the next 50 years.” *Saskatoon Star-Phoenix*, 1 October 2010, A1.


Hutton, David. “Mayor says River Landing paying off; Tall, not sprawl, key to project.” *Saskatoon Star-Phoenix*, 31 December 2011, A3.

Hutton, David. “Millions up for debate as city launches review; ‘No sacred cows’ as transit cuts, parking fee increases tabled.” *Saskatoon Star-Phoenix*, 12 July 2011, A1.

Hutton, David. “More money not coming, Wall; Saskatoon to get $9 million less than gov’t first promised.” *Saskatoon Star-Phoenix*, 2 February 2010, A1.


Hutton, David “New bins fuel trash talk; Front-yard pickup conversion half complete; city pleased with process.” *Saskatoon Star-Phoenix*, 24 April 2009, A1.

Hutton, David. “Recycling consensus elusive; City attempts to firm up costs of local program” *Saskatoon Star-Phoenix*, 4 December 2010, A3.

Hutton, David. “Recycling consultations delayed; City to study impact of provincial program.” *Saskatoon Star-Phoenix*, 21 May 2010, A10.
Hutton, David. “Recycling expansion debated; Critics say city recycling is substandard.” *Saskatoon Star-Phoenix*, 26 May 2010, A3.


Hutton, David. “Roads top issue for second straight year; Concern over policing, crimes drops.” *Saskatoon Star-Phoenix*, 15 June 2012, A3.


Klein, Gerry. “City must get jump on traffic trend.” *Saskatoon Star-Phoenix*, 3 July 2008, A10.


MacLean, Rory. “Cosmo concerns dominate debate; Meetings start on city recycling alternatives.” *Saskatoon Star-Phoenix*, 9 September 2010, A3.

MacLean, Rory. “Cosmo criticizes recycling bid scores; Council to discuss report tonight.” *Saskatoon Star-Phoenix*, 16 April 2012, A1.


Neault, Maurice; Paulsen, Tiffany; Penner, Glen; Pringle, Bob; Wyant, Gordon. “Saskatoon’s urban evolution.” *Saskatoon Star-Phoenix*, 13 March 2009, A9.


Nickel, Rod. “City officials support hikes to bus fares.” *Saskatoon Star-Phoenix*, 23 November 2004, A7.


Nickel, Rod. “Transit system riding high; Gas prices, students play roles in boosting ridership by 12 per cent.” *Saskatoon Star-Phoenix*, 20 May 2008, A2.


O’Donnell, Sarah. “City could be first to dump the dump: Composter reduces need for landfills.” *Edmonton Journal*, 12 September 2003, B3.


Patrick, Robert. “Building out way out of congestion impossible task.” *Saskatoon Star-Phoenix*, 9 September 2010, A11.


Reston, Don. “City wins environment award for keeping waste out of landfill: Mayor predicts other cities will look to Edmonton.” Edmonton Journal, 2 June 2000, B8.


Ruttan, Susan. “City looks at user-pay trash system; Paying for garbage collection solely through fees, not taxes, would bring Edmonton in line with neighbours.” Edmonton Journal, 19 March 2008, B3.


Schreier, Margrit. *Qualitative Content Analysis in Practice.* London: SAGE. 2012.


Staples, David. “Bus rapid transit seen as option until LRT lines are citywide; Trains more expensive, seen as most desirable choice for consumers.” *Edmonton Journal*, 13 May 2011, B1.


Star-Phoenix Editorial Board. “City needs help coping with cost to handle waste.” *Saskatoon Star-Phoenix*, 15 September 2003, A8.


Star-Phoenix Editorial Board. “Freeze transit until changes can be made.” *Saskatoon Star-Phoenix*, 7 March 2005, A6.


Star-Phoenix Staff. “Committee to study tax credit.” *Saskatoon Star-Phoenix*, 20 April 2005, A8.


Stewart, Jeanette. “’Reduce the asphalt,’ Gehl says; Architect touts bike-friendly culture.” *Saskatoon Star-Phoenix*, 2 September 2009, A3.


Warren, Jeremy. “City seeking your views on recycling; Steps being taken to revamp consultation process.” *Saskatoon Star-Phoenix*, 17 August 2010, A3.

Warren, Jeremy. “Cosmo supporters plead case; Loraas questions proposed fee; SCR will fold without contract.” *Saskatoon Star-Phoenix*, 25 May 2011, A3.

Warren, Jeremy. “Council backs curbside; City to see bids for mandatory recycling program.” *Saskatoon Star-Phoenix*, 14 June 2011, A1.


Wingrove, Josh. “City says bus plan would cut traffic; But residents living near Stony Plain Road fear it is a recipe for congestion.” *Edmonton Journal*, 7 June 2007, B8.

Wingrove, Josh. “Growth drives express bus plan; Proposal to designate bus-only curb lanes along key corridors envisions dramatic shift in west-end traffic patterns.” *Edmonton Journal*, 17 June 2007b, A13.

Wingrove, Josh. “Last chance to catch west-end BRT debate; Rapid transit proposal open for public input today; planners say it’s faster, cheaper than LRT expansion.” *Edmonton Journal*, 9 July 2007, A12.


Zellner, Moira L.; Reeves, Howard W. "Examining the contradiction in 'sustainable urban growth': an example of groundwater sustainability." *Journal of Environmental Planning and Management* (vol. 55, no. 5). 2012: pp. 545-562.
Appendix 1

Beliefs
- Deep Core
- Policy Core
- Secondary Belief

Coordination
- Hard Coordination
- Soft Coordination

Sustainability
- Weak Sustainability
  - Anthropocentric Ethic
  - Perfect Substitutability
  - Temporary Limits to Growth
  - Technological Solutions
- Strong Sustainability
  - Ecological Ethic
  - Limited Substitutability
  - Absolute Limits to Growth
  - Behavioral Solutions

Narratives
- Heroes
- Victims
- Villains
- Scenarios
- Arguments

Actors
- Elected Officials
- Civil Servants
- Journalists
- Policy Activists

Issues
- Solid Waste
- Public Transportation
- Active Transportation
- Energy Production
- Water Security
- Waste Water
- Land Use
- Emissions Control