Understanding Influences on Participation in Administrative Rulemaking: Decisions on the Content of the Australian Building Code

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

Mark Alan Burgess

14th December 2016
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Abstract

Government regulation affects the daily lives of all Australians. In setting regulation, governments aspire to balance the expectations of society with expert information to arrive at outcomes which deliver a net benefit to the community.

Croley’s (2008) administrative process theory states that the delivery of regulation in the public interest is conditional on government agencies actively encouraging broad interests to participate in the regulatory setting process. Participation can provide democratic legitimacy to a process where regulation is set by non-elected officials in executive government, and provide those officials access to information which represents societal expectations and expert views. The aim of this research is to evaluate the influence of administrative processes on participation across all stages of rulemaking by an Australian government agency. An inductive research methodology is applied to evaluate the processes implemented by the Australian Building Codes Board to establish whether they encourage participation by those who are ‘best suited to shape the regulatory outcomes’.

Although the administrative processes of this government agency provide opportunities for open participation, they do not result in actual participation. Outside of those parties specifically included or mandated by current procedures there appears to be an absence of involvement by independent participants. This observation indicates that administrative processes which simply allow open participation when setting regulation may not satisfy Croley’s (2008) condition to encourage participation by broad interests. This research finds that that there may be both direct and indirect influences on the actual level of participation in practice.

The formal rules and processes of the administrative agency may exclude, allow or mandate participation, and thereby directly influence the potential level of participation. Where participation is permitted but not mandated, actual levels of participation may be indirectly influenced by the actions and language of the administrative agency. These indirect influences may not affect all participants equally, potentially impacting the balance between the types of participants active in the regulatory process and therefore altering the kind of information available to decision makers in government agencies.

Empirical analysis of the administrative processes used to set the Australian building code over four years finds participant expertise may represent one example of indirect influence. Multiple opportunities to participate in the process are open to anyone, but these opportunities are largely taken up by those expert in building technology or regulation. Research findings indicate this imbalance may be caused by an implied necessity for domain expertise dissuading participation by
those who are not expert in building technology. Although expert participants may be suited to deliver technically sound regulatory outcomes, they may not be able to provide the Australian Building Codes Board with information representing broad societal expectations of the built environment.

This thesis has implications for regulatory theory and its application. Its theoretical contribution combines Yackee’s (2014) information capacity model with Croley’s (2008) administrative process theory, introducing participant expertise as an influence which may moderate the level to which the direct rules and processes of the government agency encourage participation. This contribution is developed into a participatory model which is then applied to evaluate the processes of the Australian Building Codes Board against its stated objectives. The findings are framed to suggest changes to current building code practices and may assist regulatory practitioners in other domains when developing future administrative processes.
Acknowledgements

A number of people and organisations have assisted, influenced, encouraged and motivated me on this journey from curiosity through to bound thesis. I would like to gratefully acknowledge their contributions.

My supervisors, Dr Doug Thomson and Associate Professor Ashton de Silva whose kind support and guidance steered this journey, along with Dr Paul Gibson and the faculty at the Graduate School of Business and Law whose efforts meant I never felt I travelled the journey alone.

My employer, the Commonwealth Scientific and Industrial Research Organisation, for their flexibility and assistance allowing me to combine two full time undertakings. I would like to specifically thank Dr Cathy Foley for her support in getting this journey started.

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Mark Burgess
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### Glossary and Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ABCB</td>
<td>Australian Building Codes Board</td>
</tr>
<tr>
<td>ABCB Office</td>
<td>The part of the Commonwealth Department responsible for assisting the ABCB Board in undertaking its functions and exercising its powers.</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>AFAC</td>
<td>Australian Fire Authorities and Emergency Services Council</td>
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<tr>
<td>BCA</td>
<td>Building Code of Australia</td>
</tr>
<tr>
<td>BCC</td>
<td>Building Codes Committee. A technical review panel of the Australian Building Codes Board, convened from State and Territory building administrations, industry representatives and ABCB secretariat</td>
</tr>
<tr>
<td>CIB</td>
<td>International Council for Research and Innovation in Building and Construction</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
</tr>
<tr>
<td>Informative</td>
<td>Part of a standard, code or regulatory document provided as a commentary or additional guidance material. In the context of building regulation, this may represent the Guide to the Building Code, handbooks or other education material.</td>
</tr>
<tr>
<td>IGA</td>
<td>Intergovernmental Agreement. An agreement between jurisdictions of government. For this thesis, Intergovernmental Agreement refers to the specific agreement forming and setting the rules for the Australian Building Codes Board</td>
</tr>
<tr>
<td>IRCC</td>
<td>Inter-Jurisdictional Regulatory Collaboration Committee</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organisation</td>
</tr>
<tr>
<td>Normative</td>
<td>A mandatory part of a standard, code or regulatory document.</td>
</tr>
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</table>
OBPR  Office of Best Practice Regulation. A functional area in the Australian Government’s Department of Finance and Deregulation

PCA  Plumbing Code of Australia

PIA  Preliminary Impact Assessment. An Australian Building Codes Board document template used for the assessment of impacts from changes to standardisation or regulation.


Proponent  Term describing the person or organisation submitting a Proposal for Change (PFC)

RIA  Regulatory Impact Assessment. The process defined by the Office of Best Practice Regulation leading to the completion of a Regulatory Impact Statement

RIS  Regulatory Impact Statement. A template developed through the Office of Best practice Regulation for measuring the impact of regulatory change
Chapter 1. Introduction

Regulations generated by the administrative agencies of executive government exercise significant influence (Administrative Review Council 1992) yet their development goes unnoticed by much of society (Administrative Review Council 1992; Rinfret & Furlong 2012). Sourcing information is a central problem for these government agencies (Breyer 1982) with the type of information available to decision makers directly linked to the extent and nature of participation in the regulatory process (Kerwin 2003). Participants may provide information ranging from the expert views of science to the expectations and aspirations of society, with general agreement that a balance between the two is desirable (Rayner & Cantor 1987; Sjoberg 2001; Slovic et al. 2004; Sundlof 2000). However, that balance is difficult to achieve in practice (Pidgeon 1998).

This thesis is about participation in the administrative processes used by the executive arm of government to set regulation. Theorists agree that participation is influenced by the administrative processes used by government agencies when setting regulation (Croley 1998; Mashaw 1990; Wagner 2013). The Australian Government aspires to consultative regulatory development (Administrative Review Council 1992) with participation encouraged by legislation (Legislative Instruments Act (Cth) 2003). This legislation defines administrative mechanisms and processes which provide opportunities for members of Australian society to participate in the development of regulation (Australian Government Solicitor 2014).

The administrative processes used by the Australian Building Codes Board provide a source of empirical data on the level of participation during development and revision of the Australian building code (Australian Building Codes Board 2012a). This research will qualitatively evaluate the influence of these administrative processes on actor participation across all stages of rulemaking by this Australian Government agency. It will look beyond the mechanistic rules and formal procedures defined in legislation, to investigate how processes may influence both participation in general, and the balance of information available to decision makers.

Findings will be applied to suggest changes to the existing practices of the Australian Building Codes Board, while the established link between participation and information (Kerwin 2003) indicates that they may also be applicable to other regulatory agencies which use participation as a source of information for their decision making.
1.1 Chapter Outline

As a background to this research, regulation and rulemaking will be defined in their broad legislative and theoretical setting. Rulemaking delegated to administrative agencies of government will then be explored, introducing the processes used in development of Australia’s building code.

The role of participation is considered from the perspective of how participants are influenced by administrative processes. The framework of administrative process theory (Croley 2008) will be used to develop research questions and the analytical approaches to answering those questions are described in the research design.

The final sections of this chapter will explain the significance of this research in relation to Australia’s building environment and regulatory theory, establishing its scope as well as identifying limitations. The chapter ends by outlining the structure of the thesis.

1.2 Defining Regulation and Rulemaking

This research seeks to explore the chain of links between Australian regulation, the processes to decide that regulation, the information guiding those decisions, and the actors who provide this information through their participation in the administrative processes which set regulation. Taking the published regulation as one end of this chain, this background section of the thesis will start at the other end by defining regulation in law and the legislative process. It will then trace regulation from this broad legislative setting to the actions of rulemaking by executive government agencies and the specific administrative processes applied to the development of Australia’s building code. It is these administrative processes which are the focus of study in this thesis.

1.2.1 Regulation in the Theoretical Context

Setting parameters on the scope of regulation is not straightforward. The wider literature identifies this complexity and varying definitions (Morgan & Yeung 2007; Windholz & Hodge 2012) ‘which are not reducible to some platonic essence of single concept’ (Baldwin, Scott & Hood 1998, p. 2).

Regulation has been variously described from the legal perspective and its enabling instruments (Administrative Review Council 1992), through economic theory (Stigler 1971), as an aspect of administrative law (Stewart 1975) and as commands exerted through state influence and control (Baldwin, Cave & Lodge 2012).

To reduce the complexity in respect to this study, regulation will be differentiated from other aspects of law used in systems of government. Regulation is divided between ‘either the electoral process and the incentives operating on politicians, or the bureaucratic process and the incentives operating on regulators as the focus of analysis’ (Joskow & Noll 1981, p. 36). In Australia, a
distinction is made between the functions of legislative, executive, and judicial bodies (Administrative Review Council 1992). The judicial function, whether enacted through common or case law, is not the target of this research. Instead, the focus is on the government’s executive function, concentrating on regulation as enacted through subsidiary legislation (Australian Government Solicitor 2014) and the processes of standard setting and rulemaking by administrative agencies.

Definitions for regulation are both diverse and contested (Baldwin, Scott & Hood 1998; Morgan & Yeung 2007). Following Windholz and Lodge’s argument that ‘what is important is what we want to do with this concept rather than what the concept means in some fundamental sense’ (2012, p. 217), this research will not seek a definitive meaning for regulation, but instead look towards a definition that aligns with the focus of administrative process and participation in this thesis. Black (2002) developed definitions of regulation from this participative perspective, seeing regulation as decentralised from the regulatory state, to a regulatory society. Her definition extends the functional control aspects of regulation with the goal-oriented dimensions, mechanisms of standard setting, and processes of information gathering.

Regulation is the sustained and focused attempt to alter the behaviour of others according to defined standards or purposes with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms of standard setting, information gathering and behaviour modification. (Black 2002, p. 20)

This definition incorporates key elements aligned with this research. Information gathering and the intent to produce outcomes are implicit in participative administrative processes (Croley 1998), while the mechanisms of standard-setting and delivering outcomes designed to alter the behaviour of others, are relevant to the aims of a building code (Bukowski 2002). Therefore, in line with Windholz and Hodge’s (2012) methodological approach to identify a definition based on the research aim rather than seek a fundamental meaning, Black’s (2002) definition is selected for this study. This approach shifts this study away from the broad disciplines of political and regulatory science towards a focus on the specific processes of rulemaking by the administrative agencies of executive government.

1.2.2 Rulemaking by Executive Government

It is impractical for elected officials to develop the quantity and detail of regulation required for government (Administrative Review Council 1992; Kerwin 2003). Thus, governments have developed mechanisms to delegate development of regulation to other executive bodies. This is achieved through the Legislative Instruments Act Cth (2003) in Australia (Australian Government
Solicitor 2014) and the Administrative Procedure Act (1946) in the U.S. (Breyer 1982). This delegated authority is generally termed ‘rulemaking’, and widely referenced in literature on regulatory theory with its appearance in book titles (Kerwin 2003), bibliographies (Rinfret & Cook 2014b) and government reports (Administrative Review Council 1992).

At a generic level, the term rulemaking could imply any process of making rules. For clarity in relation to this research, rulemaking is defined as the process of implementing, interpreting or prescribing law or policy (Administrative Procedure Act 1946) through authority delegated by Parliament (Administrative Review Council 1992). This thesis will apply the terminology and concept of rulemaking as established by Australia’s Administrative Review Council (1992), the Legislative Instruments Act (Cth) (2003), and its associated explanatory memorandum (Commonwealth of Australia 2003). The term rulemaking is applied as a verb, describing the actions of rule makers applying administrative processes under delegated authority. The outcomes of those processes can be various types of legislative instruments, which include regulations, statutory rules, ordinances and proclamations (Commonwealth of Australia 2003). To avoid confusion and allow this research to apply across jurisdictions, these instruments are collected under the generic term of regulatory outcomes. Therefore in this thesis, rulemaking is a process undertaken by rule makers, developing regulatory outcomes under delegated authority from the legislature.

1.2.3 Rulemaking is Important, Yet Lacks Attention

The absence of public attention on delegated rulemaking is out of proportion to its significant effect on both individuals and businesses (Administrative Review Council 1992). Agency rulemaking in the U.S. is ‘much less visible to the public than is the legislative process...yet the rules produced by these agencies in many cases have a more direct effect on individuals, business and society than the laws themselves’ (Rinfret & Furlong 2012, pp. 373-4).

The elevation of rulemaking to this important position is identified in changes within the U.S. Federal Government, where ‘the centre of gravity of the powers it exercises has gradually shifted, from the legislature in the first half of the nineteenth century, to the judiciary in the second half of the nineteenth century, to the executive and administration in the twentieth century’ (Freedman 1998, p. 471). Administrative process and rulemaking now ‘rivals the legislative process in its significance as a form of governmental output’ (West 2005, p. 655). Categorised as the ‘fourth branch’ of government, ‘decisions dwarf the other three branches [Congress, the courts and territory governments], certainly by volume and quite possibly by importance as well’ (Croley 1998, p. 3).

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1 For clarification, Acts of Parliament, primary legislation, or rules of court are not considered to be legislative instruments (Legislative Instruments Act (Cth) 2003), and therefore not an outcome of rulemaking.
The impact of rulemaking on society is observed in both its coverage and effect. Croley notes its all-encompassing nature, arguing ‘in many profound ways, the innumerable activities of everyday life - working, travelling, transacting, recreating, indeed eating, drinking, and breathing - are affected by the work product of federal administrative agencies’ (Croley 1998, p. 3).

The type of rulemaking studied in this research is therefore recognised as an important category of government, significant in both its regulatory output and its impact on society. But, having established that rulemaking touches the lives of the general public raises a question of whether the public should simply accept and comply with those rules, or whether it should seek a more active role in their development.

1.2.4 Participation in Rulemaking

Legislative processes in Australia and the U.S delegate authority for rulemaking from the elected government to the administrative agencies of executive government (Administrative Procedure Act 1946; Legislative Instruments Act (Cth) 2003). However, Kerwin (2003) describes a dilemma with this delegation. On one side, rulemaking by administrative agencies allows the government to be responsive to societal demands, freeing the legislative bodies of government to attend to other issues. On the other side, agencies may be seen as violating democratic principles, resulting in laws written by unelected administrative officials. Kerwin argues that ‘elected representatives have confronted this dilemma on numerous occasions and decided that one answer is direct participation by the public in rulemaking’ (2003, p. 158).

Providing an opportunity for a public voice is seen as beneficial to administrative rulemaking. Participation can address the democratic concerns of making laws outside the legislature (Bingham, Nabatchi & O’Leary 2005; Rinfret & Furlong 2012; Wagner 2013; West 2004; Yackee 2014). Scholars recommend that rulemaking agencies encourage the opportunity for participant access (Croley 2008; Harter 1982) with this theoretical position also reflected in current practice. The delegation of rulemaking power in both Australia and the U.S. encourages administrative agencies to seek participation by domain experts, and by those citizens and groups who may be affected by the rulemaking outcomes (Administrative Procedure Act 1946; Australian Government Solicitor 2014).

1.2.4.1 Who Can, and Who Does, Participate?

Identifying a list of potential participants with access to rulemaking will not predict whether they have the awareness, capability or inclination to participate. While opportunities to participate are enabled by the processes of rulemaking agencies in each country (Administrative Procedure Act 1946; Australian National Audit Office 2014; Council of Australian Governments 2007), the
rulemaking literature presents divergent views on whether those opportunities translate into actual participation.

On the one hand, U.S. research identifies rulemaking participation by businesses, organised interest groups and the general citizenry (Croley 1998; Furlong 1997) with arguments that, where the opportunity exists, all these groups will actively participate in administrative rulemaking processes (Croley 1998; Golden 1998; Rinfret & Cook 2014b). A counter position argues that the right to participate does not necessarily ensure participation (Daley 2012; Yackee 2014) or lead to representation of all relevant groups (Stewart 1975). Participant absence has been associated with an unawareness of the right to participate (Rinfret & Furlong 2012), a sense of ineffectiveness, or perceived lack of capability (Yackee 2014).

This question is unresolved in the literature. This research will approach the study from Kerwin’s perspective that ‘opportunities to participate do not ensure that participation will actually occur’ (2003, p. 178). The research problem will be framed to avoid an assumption that administrative systems providing access to rulemaking automatically encourage participation, thereby allowing analysis to differentiate who can and who does actually participate (Croley 2008).

1.2.4.2 Sources of Information, Scientific Analysis and Societal Expectations

Having established that this research will evaluate who can and who does actually participate in rulemaking, this background discussion turns to what type of information those participants bring to the decision making process. In practice it is difficult to separate the administrative process, the level of participation and the resultant information (Bingham, Nabatchi & O'Leary 2005) with Kerwin asserting an absolute position that ‘information and participation cannot be separated’ (Kerwin 2003, p. 56). This research will parallel the identification of potential participants with an evaluation of the type of information they may contribute. Specifically, it will differentiate the views of experts with their technical and scientific perspective from the views of members of the general public who are affected by the regulatory outcomes, who voice societal expectations.

Participation plays a role in providing democratic legitimacy to the processes of executive government (Croley 1998; Kerwin 2003; Rein 1983). It fills this role, in part, by providing opportunities for the submission of societal values (Sundlof 2000), societal perceptions of risk (Pidgeon 1998), and expert scientific and technical information (Rutter 2012). It is accepted that decision making should be informed by a balance of expert and values-based viewpoints (Rayner & Cantor 1987; Sjoberg 2001; Slovic et al. 2004; Sundlof 2000). Pidgeon asserts ‘balancing and integrating the best available scientific judgements and evidence on the one hand with aspects of
ethical values on the other hand, is perhaps one of the most difficult questions to be faced by

The aspiration for a balance of views is not always achievable in practice. Slovic (1999) distinguishes
between ‘risk as feelings’ referring to the instinctive and intuitive aspects of risk, and ‘risk as
analysis’ signifying risk associated with scientific reason. He then proposes ‘risk as politics’ to define
situations where qualitative societal views and quantitative scientific analysis do not align (Slovic et
al. 2004). Slovic’s description played out in practice during the Royal Commission into Victoria’s
Black Saturday bushfires, where the Australian Building Codes Board were criticised for not
managing this balance (Teague, McLeod & Pascoe 2010). The Commission expressed a clear view
that ‘policy matters such as the level of stringency required…should not be left to a technical
committee consisting of volunteers’ (Teague, McLeod & Pascoe 2010, p. 255). Similar misalignment
is recognised in the U.S. where there is conflict between legal, rational and consensual imperatives
when translating policy into practice (Rein 1983) and ‘tension between scientifically informed
decision making and democratic ideals’ in rulemaking (Daley 2012, p. 489).

Participants with technical knowledge in the subject matter are privileged in many areas of
administrative rulemaking (Yackee & Yackee 2006), and groups with more credible information have
a greater opportunity to influence decision makers (Croley 2008). Reviews of public comments to
U.S. rulemaking processes found a lack of participation from both general citizens (Golden 1998) and
representation of public interests (Wagner 2013), leading to a conclusion of ‘compelling evidence of
participatory imbalances’ (Wagner 2013, p. 680). Yackee finds that an actor’s expertise level forms
an ‘important predictor of perceived voice during agency rulemaking’ (Yackee 2014, p. 442), arguing
that a perceived low level of technical knowledge may dissuade the general public from participating
in the rulemaking process. Croley concludes that although electoral votes may be the currency of
elected officials, ‘information is the currency of administrative decision making’ (Croley 2008, p.
135), explaining an advantage for those participants who can offer expert information to rule
makers.

A balance between expert scientific and societal input to rulemaking is not reflected in findings from
empirical studies of rulemaking in practice. The privilege afforded expert views (Croley 2008) and
the absence of public participation (Golden 1998) suggests an advantage for groups providing
empirical evidence over those expressing the ‘feelings’ of society. This imbalance has been directly
associated with the administrative processes used by rulemaking agencies (Yackee 2014).
1.2.4.3 Relationship between Administrative Processes and Participation in Rulemaking

Institutionalist theories extend rulemaking scholarship beyond the role of participating actors and illustrate the links between administrative processes, organisational structures and regulatory outcomes (Baldwin, Cave & Lodge 2012; Carrigan & Coglianese 2011). Early institutional theorists argued that administrative processes were implemented by legislature as a method to monitor and control the bureaucrats to whom they delegated rulemaking authority (McCubbins, Noll & Weingast 1987). It was suggested that the requirements for participation were included in those processes as an alarm mechanism, such that any protestations by participants would alert the legislature to potential issues (McCubbins, Noll & Weingast 1987). Later research counters this notion, proposing that rather than enhancing control of rulemaking agencies, extended participation increases their independence from the legislature (Croley 1998, 2000). Although these differing views are as yet unresolved (Garrett 2000; Mashaw 1990), both are important to this research by establishing the link between the processes used by administrative agencies and their influence over the level of participation in rulemaking.

This link will be studied from the perspectives of participant and process. Furlong identifies the necessity to study participants concluding that ‘the role of interest groups and how they might influence rule making is crucial to the study of how executive agencies administer policies...’ (Furlong 1997, p. 339). Croley (2008) encourages researchers to focus on rulemaking process and its procedural complexities from a theoretical perspective which examines how administrative processes allow, encourage or mandate participation. This research will leverage both perspectives to explore the relationship between administrative processes and participation, but while doing so remain cognisant that information and participation are also linked (Kerwin 2003). It will use data collated under a stable and documented rulemaking process which includes both the details of participant types and the specific information those participants bring. This is found in the processes used by the Australian Building Codes Board to develop and revise Australia’s building code.

1.2.5 Introduction to Australia’s Building Code

Although Australia’s building and construction industry is subject to regulation from all levels of government (Productivity Commission 2006b), the requirements for what is built are regulated through a single National Construction Code (Australian Building Codes Board 2012c). Comprising separate volumes for building and plumbing, this document is a codification of rules, enacted into regulation through parallel legislation in all States and Territories (Commonwealth of Australia 2012). Responsibility for the publication and ongoing revision of these codes is delegated from the States and Territories to the Australian Building Codes Board, an administrative agency established by an Intergovernmental Agreement between Australia’s federal, state and territory governments.
The relationship between these parties and the key documents are shown in Figure 1-1. Each party is explored in detail in Chapter Four.

![Diagram](Commonwealth of Australia 2012). This identifies the relationships between the parties and key documents in the Australian building code.

Source: Adapted by the author from text (Commonwealth of Australia 2012; Office of Best Practice Regulation 2007).

This research will use the building code volumes of the National Construction Code, collectively termed the Building Code of Australia (Australian Building Codes Board 2012c). This is ‘a technical document providing information to building practitioners... a regulatory document by which to specify and judge compliance, the mechanism by which national consistency is achieved, and a social document purporting to set society’s minimum acceptable standards for health, safety and amenity’ (Productivity Commission 2004, p. 29).

Changes or additions to the building code content are enacted through a formalised administrative process (Australian Building Codes Board 2012a). Anyone can participate in the initiation of this process by submitting a proposed change using a standardised document template. The submitted proposal is reviewed by a technical Building Codes Committee convened from government building
authorities and industry representatives (Australian Building Codes Board 2012a) with their recommendations collated into a draft building code. A further opportunity for public participation is then provided through an open invitation to submit comments in response to the content of that draft. The comments received are reviewed by the technical committee, with final changes published following formal approval by a vote of the Australian Building Codes Board.

The administrative processes used to administer and revise Australia’s building code provide opportunities for governments, industry and the general public to participate. The formalised processes generate a document trail of change proposals, meeting discussions, published drafts, submitted comments and the resultant changes to enacted regulation (Australian Building Codes Board 2012a). Collectively, these formal processes and documentary records provide a window on the intertwined factors of administrative process, participating actors and information relied on by rule makers. Study of the changes made to Australia’s building code - who initiated them, and who participated in the decision process - may provide new insights into rulemaking theory. Applying those insights and findings from previous rulemaking literature to the current practices of the Australian Building Codes Board may identify shortcomings and potential improvements, leading to recommendations for change.

1.2.6 Applicability of United States Rulemaking Research
This thesis will focus on influences on participation in rulemaking rather than the technical content of building regulations. Therefore, the research does not seek to compare Australian practice to other international building codes, but instead draw on the broader empirical and theoretical knowledge base generated from literature on U.S. rulemaking.

The Administrative Procedure Act (1946) is present in almost all U.S. administrative agencies (Kerwin 2003). It manages the delegation of rulemaking authority outside the legislature (Coombs 2002), using participative requirements to ensure agency procedures are fair and accessible (Croley 2000). The Act’s formal ‘notice and comment’ process facilitates access for the general public to view and comment on proposed rules, with administrative agencies required to consider each comment before promulgating the final rule (Kerwin 2003). A significant body of U.S. literature on participation in rulemaking researches the processes detailed in this Act (Rinfret 2011; Rinfret & Cook 2014b; West 2005) and landmark studies have been made possible through the availability of information generated by the ‘notice and comment’ process (Furlong 1997; Golden 1998; Yackee & Yackee 2012).

In Australia, rulemaking outside of Parliamentary process is enacted through the Legislative Instruments Act 2003 (Cth) (Administrative Review Council 1992). One legislative pathway under
this Act is through an intergovernmental agreement, allowing administrative issues that sit within the jurisdiction of the States and Territories to be managed by the Commonwealth, and applied uniformly across the nation (Administrative Review Council 1992). The Australian Building Codes Board is created and managed under this type of agreement (Commonwealth of Australia 2012).

There are similarities in the participative rulemaking processes defined in the U.S. Administrative Procedures Act (1946) and prescriptive requirements in the Intergovernmental Agreement delegating authority for Australia’s building code (Commonwealth of Australia 2012). Explored in detail during methodology development described in Chapter Three of this thesis, these similarities include direct participation in decision making fora (Productivity Commission 2004), defined stages of participation (Australian Building Codes Board 2012a), and formal opportunity for the general public to comment on proposed rules (Australian Building Codes Board 2015c; Kerwin 2003). Coombs’ (2002) direct comparison of the two systems concludes that aspects of U.S. practice could be adopted in Australia.

Although identifying similarities between the two systems, this thesis is not a comparison between U.S. and Australian rulemaking processes. Parallels between the administrative processes used in setting Australia’s building code and those in the U.S. Administrative Procedure Act (1946) are identified to allow this Australian research to incorporate insights from the significant body of empirical research and academic theory that exists on U.S. rulemaking (Baldwin, Cave & Lodge 2012; West 2005).

1.2.7 Summary of Background Section
This background section has defined the administrative processes of rulemaking within the legislative and regulatory environment, described the processes used to develop Australia’s building code, and established similarity to rulemaking in the U.S. setting. The significance of rulemaking to society is highlighted, as well as the role of participation and its potential effect on the types of information available to administrative agencies.

Although scholars call for a balance of views, a preference for scientific and evidence based information is found in practice. The importance of regulations in people’s daily lives is not reflected in participation levels, with the general public largely absent from rulemaking. This absence raises a question of how administrative agencies source information representing the views, expectations and aspirations of society.
Study of the processes used in setting the content of Australia’s building code may provide theoretical and practical insights into the relationship between the administrative process, participation, and information in rulemaking.

1.3 Influences on Participation: Research Problem and Aim

Based on the links between process and participation established by institutionalist theorists (Croley 1998; Mashaw 1990; McCubbins, Noll & Weingast 1987), this research proposes that the rules and processes enacted by administrative agencies of government may directly and indirectly influence participation.

The mechanisms which provide opportunities for participation in rulemaking are set by the legislative rules and Acts directing administrative agency operations (Legislative Instruments Act (Cth) 2003; Commonwealth of Australia 2012). The problem addressed by this research is to look beyond these mechanistic aspects of participation to understand the influence of administrative processes on potential actors throughout all the stages of rulemaking. The aim of this qualitative study is to evaluate the influence of administrative processes on actor participation across all stages of rulemaking by an Australian government agency, through case study analysis of changes to building regulation from 2009-2013. This influence may affect the types of actors who participate and thereby alter the balance of information available to rulemaking agencies (Bingham, Nabatchi & O’Leary 2005), in turn impacting decision making and the resultant regulatory outcomes.

1.3.1 Limitations Identified in Prior Research

Research by regulatory theorists and political scientists has concentrated on participation and interest group influence on legislative government (Furlong 1997; West 2005). Limited attention has been granted to rulemaking which is delegated to administrative agencies, with Furlong’s (1997) and Golden’s (1998) research acknowledged as the earliest empirical studies (Rinfret & Cook 2014b). There is a knowledge gap on the effect of administrative processes on both the level of participation and the balance of information provided to rulemaking agencies (Croley 2008; Rinfret & Furlong 2012; West 2005; Yackee & Yackee 2010). Some empirical studies find an absence of public participation (Golden 1998; Rinfret & Furlong 2012) or the predominance of interest group influence (Croley 2008; Wagner 2013) but others are hesitant to draw conclusions due to the lack of established baselines in rulemaking literature (Yackee & Yackee 2006). Disagreements in this early literature (Kerwin 2003; Rinfret & Cook 2014b; West 2005) are linked to the methodological challenge of measuring participant involvement in administrative agency rulemaking (Furlong 1997; Golden 1998; Rinfret & Cook 2013; West 2004).
The majority of U.S. rulemaking literature evaluates the final ‘notice and comment’ stages of rulemaking, when proposed rules are published and comments invited from the general public (Rinfret & Cook 2013, p. 5). In practice, administrative rulemaking starts with idea generation well before any proposed rules are drafted (Yackee & Yackee 2012), and participants engage with administrative agencies throughout the entire process of translating policies into regulation (Furlong 1997). Wagner, Barnes and Peters note that ‘a great deal of interest group influence’ occurs outside of notice and comment’ (2011, p. 108) and studies question whether current research findings would be different if measured in the earlier, pre-proposal stages of rulemaking (Rinfret & Furlong 2012). Yackee and Yackee (2012) lament that there does not appear to be a research method to measure participation in U.S. rulemaking all the way from the ‘bright idea’ through the pre-proposal stage.

Evaluating the influence of the administrative process is therefore compounded by a secondary problem: the challenge of identifying a research method to capture influences on participation during those pre-proposal stages of rulemaking not included in prior U.S. studies. The internal communications and informal interaction with administrative agencies that occur during the early stages of rulemaking present research challenges for scholars (Rinfret & Furlong 2012). While highlighted as important, the absence of access to pre-proposal data results in this stage generally ignored by researchers (West 2005). Furlong recognised this challenge, suggesting that ‘future research may want to examine the development of policies from “cradle to grave” and examine interest group participation throughout’ (Furlong 1997, p. 341).

In contrast to the informal initiation and pre-proposal stages in U.S. rulemaking (Rinfret & Furlong 2012; West 2005), the processes enacted by the Australian Building Codes Board provide access to empirical data from the initiation of change through all processes up to the published regulatory outcomes (Australian Building Codes Board 2012a). A common change proposal template initiates a structured process encompassing rule development, distribution for public comment, and eventual publication in Australia’s building code (Australian Building Codes Board 2012a). These Australian rulemaking processes apply administrative structure and formality to all stages of rulemaking, and provide a window into the pre-proposal stages considered a ‘black box’ in U.S. research (West 2009).

1.3.2 Research Objectives and Outcomes
The research objectives are to characterise and segment participating actors into groups, then qualitatively analyse their participation throughout all stages of the administrative process. The role of the administrative process in achieving agreement between groups or identifying domination by given participant types, will be explored.
The processes used to develop Australia’s building code will be evaluated for evidence of Croley’s (2008) condition that administrative procedures should encourage participation in order to deliver outcomes in the public interest. The research will also include an applied objective to explore alignment between current administrative processes and the requirements set for the Australian Building Codes Board by its enabling Intergovernmental Agreement (Commonwealth of Australia 2012).

The outcomes from the research will extend the methodological approaches used in previous U.S. studies by analysing participation and applying administrative process theory at pre-proposal stages of rulemaking. Consolidating information over a four-year period of building code changes will create a unified dataset detailing 192 change proposals. Analysis of this dataset may provide empirical outcomes supporting the theoretical link between participation and administrative process suggested by Croley (2008).

1.4 Research Questions

Research questions were developed to evaluate the influence of administrative process on actor participation. These are divided into two groups. Questions one through four will address knowledge gaps in regulatory and rulemaking theory. Questions five to seven will address current implementation by the Australian Building Codes Board against policy objectives set by the legislative processes which delegate their authority (Commonwealth of Australia 2012).

1.4.1 Research Questions on Regulatory and Rulemaking Theory

The first research question asks how the administrative processes used by the Australian Building Codes Board - open initiation, industry participation on technical committees, and public comment - ‘encourage participation in regulatory decision making by those whom the theory contemplates will most affect the shape of regulatory outcomes’ (Croley 2008, p. 12)?

Research Question 1: How do participative processes in the Australian Building Codes Board’s administrative systems encourage participation by the actors who will most affect the shape of regulatory outcomes?

As access to rulemaking processes does not necessarily translate into participation (Daley 2012; Yackee 2014), the application of this question will distinguish between those who can participate, those who are encouraged to participate, and which groups actually do participate in the process.

The next question will explore whether those actors who do participate in setting Australia’s building code affect regulatory outcomes, as well as exploring the process to balance the differing views represented by participants (Pidgeon 1998). This will be measured through the application of two
tests proposed by Tetlock (2005): ‘correspondence’ evaluates how well the beliefs and values of decision making committees correspond with the real world, and ‘coherence’ analyses whether these beliefs change in response to changing evidence.

Research Question 2: Do the participative processes provide evidence of correspondence and coherence?

Willingness to participate can be influenced by an actor’s perception of whether their voice will be heard and acted on by the administrative agency (Yackee 2014). Research questions three and four will evaluate these perceptions by applying Rein’s (1983) theories for translating policy into practice. Question three will consider this from a negative perspective, considering where narrow interests may dominate processes, biasing the information available to the administrative agency, and potentially dissuading participation by others.

Research Question 3: Are current processes dominated by any interest group or organisation?

In contrast to this exploration of potential imbalance, question four will evaluate whether participation demonstrates Rein’s (1983) consensual imperative, achieving consensus and balance among a range of participants and their differing views.

Research Question 4: Do current administrative processes achieve agreement amongst participants?

1.4.2 Research Questions on Practical Implementation in Australia

The Intergovernmental Agreement (Commonwealth of Australia 2012) which delegates rulemaking authority to the Australian Building Codes Board defines objectives for the administrative processes used to develop and revise Australia’s building code. In order to evaluate the practical implementation of participative rulemaking, research questions five to seven will measure the extent to which the current implementation of administrative process achieves those objectives.

Research question five evaluates whether ‘in determining the area of regulation and the level of the requirements, there is a rigorously tested rationale for regulation’ (Commonwealth of Australia 2012, p. 8). This objective aligns with Croley’s (2008) condition for rational justification, and the rationality imperative defined by Rein (1983).

Research Question 5: To what level does current practice provide analysis to inform regulatory decisions, and meet the objective to provide a ‘rigorously tested rationale for regulation’?
Although the Office of Best Practice Regulation requires that ‘regulatory intervention should be the minimum effective regulation to achieve the Government’s objectives’ (Office of Best Practice Regulation 2007, p. 139), the Australian Productivity Commission (2004) reports increased regulatory stringency and a move towards best practice, driven by growing prosperity and society’s changing expectation of safety (Banks 2005). These drivers present a potential conflict between the Australian Building Codes Board’s objective to ‘establish codes and standards that are the minimum necessary to efficiently achieve the relevant mission of ensuring safety and health, and amenity and sustainability objectives’ (Commonwealth of Australia 2012, p. 8) and the requirement to achieve this objective through participative processes. Restated in the context of this research, will increased participation, and in particular an increased recognition of societal views, increase regulatory stringency?

Research Question 6: Does increased participation in the administrative process lead to aspirational regulatory outcomes, violating the Board’s objective to provide ‘minimum codes and standards to ensure safety, health, amenity and sustainability objectives’?

The Office of Best Practice Regulation (2007) describes a spectrum of regulation options including non-regulatory solutions such as education and self-regulation. The Intergovernmental Agreement calls for the Australian Building Codes Board to ‘encourage reduced reliance on regulation by providing a forum to explore alternative mechanisms for delivering outcomes’ (Commonwealth of Australia 2012, p. 8).

Research Question 7: To what extent do current processes apply a spectrum of regulatory and non-regulatory options, meeting the objective to ‘encourage reduced reliance on regulation by exploring alternative mechanisms to achieve outcomes’?

The analysis of each research question is detailed in chapters four and five of this thesis.

1.5 Research Design and Analysis Methods

The research questions will be evaluated using the information generated by the administrative processes of the Australian Building Codes Board as a source of evidence. The design of the research will describe the theoretical framework used to derive insights from this dataset and the methods of analysis.

1.5.1 Theoretical Framework

Croley’s administrative process theory (1998, 2000, 2008) is selected as a theoretical framework for this research. Developed in response to interest theories of regulation (Croley 1998), Croley’s theory falls within institutionalist scholarship (Garrett 2000), which encompasses both external actors and
the internal processes of government administrative agencies (Baldwin, Cave & Lodge 2012). Based on this theory’s alignment to the effects of administrative process on participation in a formalised rulemaking setting, it is preferred above other institutional theories which focus on political power balance (Adams 1981; McCubbins, Noll & Weingast 1987) or economic approaches to regulation (Stigler 1971).

The development of administrative process theory (Croley 2008) and its suitability to this investigation of Australia’s building code are explored in chapters two and three. In summary, Croley’s (2008) theory builds on the foundation that the formalised procedures used by administrative agencies can, given the correct conditions, deliver regulatory outcomes that are in the public interest. A key condition relevant to this Australian study is for the administrative agency to encourage participation in rulemaking. Croley (2008) argues that participation in rulemaking offsets the power of interest groups to dominate or influence regulatory outcomes, emphasising that for this to be achieved in practice, participation should be solicited from actors with a broad range of interests. While, Croley (2000, 2008) cites previous rulemaking literature and his own case studies, empirical links between the theory and outcomes are yet to be established (Garrett 2000). The absence of these links provides one of the knowledge gaps this research seeks to address.

1.5.2 Identifying Participating Actors

Studying participation in rulemaking requires identification of participants (Furlong & Kerwin 2005). As there is little commonality in the terminology used to describe actors or participants2 (Houle 2010), this research will first identify, characterise and segment them into measurable groups.

Regulatory theory outlines the potential for participation by a range of actors (Croley 1998, 2008; Kerwin 2003; Rein 1983), with empirical studies establishing a ‘cast of characters’ active in the actual administrative processes of rulemaking (Furlong & Kerwin 2005; Golden 1998; Rinfret 2011; West 2004). However identification of those affected by rulemaking outcomes is not straightforward (Daley 2012), with the types of actors responding to each case of rulemaking dependent on ‘particular social, economic, and political dynamics surrounding the rules’ (Kamieniecki 2006b, p. 16).

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2 For the purpose of this research, three terms are adopted. Actors is used as a collective term covering government agency staff and all those who may be affected by regulatory outcomes, whether business, interest groups or the general public. Potential participants describes a subset of actors whose participation is permitted by administrative process. Participants is reserved to describe those who actually do participate in current process. The term stakeholder will be avoided and used only when directly citing terminology used in other literature.
Pluralistic thinking in the 1950s focussed academic debate on the activity of interest groups in administrative rulemaking (Kamieniecki 2006b), explaining their participation by the need to bypass policy stalemates and congressional gridlock (Kamieniecki 2006b; Rinfret & Cook 2013; Rinfret & Furlong 2012). West (2004) extended the study of participants beyond interest groups, shifting the focus from external participants to the administrative agency itself. This research will include the types of external bodies identified as forming interest groups - industry, trade and professional associations, unions, and governments (Furlong 1997) - along with participants within the administrative agency itself.

Academic literature (Rein 1983; Sjoberg 2001; West 2005; Yackee 2014) and government practice (Administrative Procedure Act 1946; Australian Government Solicitor 2014) call for participation by those affected by regulatory outcomes. As public involvement is an acknowledged goal of regulators (Bingham, Nabatchi & O'Leary 2005; Daley 2012) and findings regarding their participation in U.S. rulemaking research mixed (Golden 1998; Rinfret & Furlong 2012; Yackee & Yackee 2006) this study will also include the general public as potential participants.

Characteristics of the participating actors identified in one rulemaking context may not be transferable to other regulatory domains (Kamieniecki 2006b). Therefore specific types of actors within the context of the building and construction industry will be included. Studies of construction innovation (Gann & Salter 1998) and project information pathways (Blayse & Manley 2004) identify regulators, technical infrastructure, building owners and building users. These will be added to the range of actors.

While prior rulemaking research may provide a list of potential participants, their grouping and segmentation differs across studies (Houle 2010; Rinfret 2011; West 2004; Yackee 2014). Some scholars provide detailed reasoning for their characterisation of participants (Furlong & Kerwin 2005), while others offer little theoretical or practical background to their approach (Golden 1998). Noting the complexity of participants identified, and the necessity for them to be in context to the studied regulatory domain, chapter four will begin with a study of actors and their grouping into segments for analysis.

1.5.3 Methods of Analysis
Early empirical research on rulemaking emphasises the difficulty of analysing the effectiveness of participation (Furlong 1997; Golden 1998; West 2004). Differences among the stages of rulemaking analysed, sources of information, types of rules selected, and the nature of government agencies studied, contribute to the methodological challenge (Rinfret & Furlong 2012; West 2009). The reasons for this difficulty include the infrequent analysis of ‘official rulemaking records’ (Kerwin
2003, p. 178) and limitations from studies which were ‘divorced from concrete observations’ (West 2005, p. 662).

An analysis of rulemaking from the context of a single administrative agency and covering all stages of the administrative process may provide an empirical research approach suited to evaluating participation. Greater understanding of participation in rulemaking will be derived from contextual analysis of an administrative agency (Croley 2000; West 2005). A focus on one policy area will allow capture of in-depth contextual information (Yackee 2014) and enable the researcher to develop insight through immersion ‘in a particular rule or small sample of rules’ (West 2005, p. 662). The research method used in this thesis will facilitate this immersive focus by using information from the formal administrative processes used to develop and revise Australia’s building code (Australian Building Codes Board 2012a).

These administrative processes will be treated as a bounded system (Stake 2000) with the 192 changes submitted over four years considered as a single case study of that system. Based on the open-ended nature of questions in the template used for the submission of proposed building code changes (Australian Building Codes Board 2012e) the research design will apply qualitative case study techniques to this data, developing a contextual understanding of processes and relationships (Stake 1995). The analysis will apply categorical aggregation techniques to the documents, where information will be coded into categories and insights derived by aggregating instances within each category (Stake 1995). This process will consolidate information throughout the rulemaking process and allow individual decisions to be traced from their initial proposal to the resultant building code change. This consolidation will provide a key differentiator from previous studies by characterising rule initiation (Rinfret 2011) then examining participation throughout the whole rulemaking process (Furlong 1997).

1.5.4 Suitability of the Research Design
The administrative processes of the Australian Building Codes Board will be analysed through the framework of administrative process theory. Case study analysis of every rulemaking decision over a four-year timeframe demonstrates an immersive approach focused on a single agency operating under a stable administrative environment, thus minimising external variables. This method aligns with calls by rulemaking scholars to increase attention to the relationship between stages of rulemaking (West 2005), consider techniques of qualitative case study (Yackee & Yackee 2012), focus on a single rulemaking area to maximise depth and context of data (Yackee 2014), and become immersed in a ‘small sample of rules’ (West 2005, p. 662).
1.6 Significance of Rulemaking on Individuals and Business

Rulemaking is ‘one of the least understood and most complex aspects of the American policy-making process’ (Yackee & Yackee 2010, p. 280) and ‘the single most important function performed by the agencies of government’ (Kerwin 2003, p. xi). Similar observations are made in Australia, where the absence of public attention is out of proportion with the far-reaching effect of rulemaking on the affairs of both individuals and businesses (Administrative Review Council 1992; Office of Best Practice Regulation 2007).

United States rulemaking is undeniably important to individual members of the public, as almost every person ‘daily entrusts his life to such negotiated rules in the form of electrical and building codes, product safety standards and workplace and health standards’ (Harter 1982, p. 35). This level of importance is also evident in Australia, where building regulations have an impact from the macro level, their economic impact on the Nation (Productivity Commission 2004), through to the micro level, affecting both cost and safety of the family home (Parliament of Australia 2015).

The Australian Government has set the efficient supply of suitable, affordable and well-located housing as a priority (Infrastructure Australia 2010b) with emphasis on the need to increase housing quantity and affordability (Infrastructure Australia 2010a). Building regulation plays a role in the efficiency of this supply, with the Productivity Commission finding that ‘reform of building regulation has delivered greater certainty and efficiency to the building industry, as well as benefits to the broader community’ (Productivity Commission 2004, p. xxi). Notwithstanding this level of importance, building and construction is still found to be ‘a neglected subject in the studies of regulation’ (van der Heijden & de Jong 2009, p. 1038).

Australia has undergone a rapid increase in regulatory stringency, with ‘risk aversion’ identified as a fundamental driver (Productivity Commission 2006a). Natural disasters impacting the built environment, such as floods, cyclones or bushfires, generate government responses towards changes in building regulation (Boughton et al. 2011; Teague, McLeod & Pascoe 2009). At the urban level, recent fire incidents in Melbourne, Australia have prompted calls for regulatory review (Metropolitan Fire and Emergency Services Board 2015a, 2015b), leading to a Senate Inquiry with terms of reference including ‘improvements to the current regulatory frameworks for ensuring building products conform to Australian standards’ (Parliament of Australia 2015).

While regulation can be a useful tool for a government to respond to catastrophic events and reduce possible harm to the community, increases in regulatory burden are discouraged. Unnecessary or overly stringent requirements add to the direct cost of administration, implementation and
subsequent community compliance (Australian National Audit Office 2014; Productivity Commission 2006a). Regulation is criticised for being used as ‘a panacea for many of society’s ills and a means of protecting people from the inherent risks of daily life’ (Banks 2006, p.10). The Australian Building Codes Board is subject to similar criticism, accused of setting requirements beyond minimum effective levels (Banks 2006) and outside their objective to set the ‘minimum necessary requirements for the design, construction and performance of buildings throughout Australia’ (Commonwealth of Australia 2012, p.2).

The conflict between increased protection and reduced regulatory burden evidences the tension between the efficiency aims of government and changing societal expectations. In setting regulatory policy, the Australian government requires the balance between harm and economic impact to be carefully considered (Australian National Audit Office 2014) but links between building regulations, construction costs and the safety of the built environment are not self-evident. Higher construction costs from increased regulatory stringency, which are intended to reduce safety risks, may have a counter-effect by suppressing the replacement of older, less safe housing (Hammit et al. 1999).

Tension between regulatory aims, societal perception of risk and the counter-intuitive nature of outcomes demonstrate the significance of the research problem addressed in this thesis. Participation in rulemaking and the balance between participant groups changes the nature of information available to the rulemaking agencies, which in turn may affect regulatory outcomes. Government legislation (Administrative Procedure Act 1946; Australian Government Solicitor 2014) and academic literature (Croley 2008; Kerwin 2003) both acknowledge the importance of participation. The significance of this research lies in the intention to delve below the generalised call for participation in order to investigate the administrative processes that influence potential participants, and to evaluate the effect of those processes on the balance between information derived from expert knowledge and societal expectations.

The findings from this work will be framed to propose changes to the processes which develop the Australian building code. These findings are significant to a building industry which accounts for nearly 7% of Gross Domestic Product (Australian Bureau of Statistics 2012), and employs 9.1% of the total workforce (Australian Bureau of Statistics 2010). Wider significance may arise from an improved understanding of how Australian administrative agencies develop regulations which impact on the everyday lives of the Australian public.
1.7 Assumptions, Limitations and Scope

The scope of building and construction is not well defined (de Valence 2010, p. 63). While construction in its broader sense extends to civil works such as bridges and roads, and includes specialist structures such as electrical transmission towers, this research will limit its scope to building classes 1 through 10 as defined by the National Construction Code (Australian Building Codes Board 2012c, 2012d). This will cover buildings and structures from detached houses through to multi-storey construction and special purpose buildings.

In 2012, Australia’s building and plumbing codes consolidated into a single, multi-volume series: the National Construction Code (Australian Building Codes Board 2013). This research will be limited to the Building Code of Australia components of that national code, primarily Volume One, Guide to Volume One, and Volume Two (Australian Building Codes Board 2012b, 2012c, 2012d). The research will also be limited to regulations defining ‘what is built’. Regulations defining the ‘way to build’, which introduce aspects of occupational health and environmental controls not covered by the National Construction Code, or ‘where to build’, covered by planning laws outside Australian Building Codes Board jurisdiction (Commonwealth of Australia 2012) are excluded.

The Australian Building Codes Board follows the principles of best practice regulation, undertaking formal impact assessments of changes or amendments to regulation (Office of Best Practice Regulation 2007). As part of the rulemaking process, a preliminary impact assessment (Australian Building Codes Board 2011) is followed by preparation of a formal regulatory impact statement should the change be considered significant (Office of Best Practice Regulation 2007). These assessments are prepared after the agency processes of drafting, participation and decision making are complete. For this research, this impact assessment process is treated as a means of oversight rather than integral to the processes of rulemaking under study. Therefore, following similar approaches in U.S. research (Furlong 1997; Golden 1998), these post rulemaking impact assessments will be excluded.

This research will limit outcomes to findings about the influence of the administrative process on participation. Previous studies identify challenges when measuring regulatory outcomes (Croley 2000), where their value is not always evident (Levine & Forrence 1990) due to the difficulty of identifying what is in the public interest (Garrett 2000). This work will not offer value judgements about Australia’s building regulations, evaluate their suitability, nor measure whether they reflect societal expectations and deliver outcomes in the public interest.
1.8 Summary and Structure of the Thesis

This chapter of the thesis introduced the broad topic of regulation, explaining the focus of the research on rulemaking by administrative agencies of government. It outlined the aim of the study to evaluate the influence of administrative processes on participation across all stages of rulemaking by an Australian government agency, and developed the associated research questions. This chapter also introduced the Australian Building Codes Board and established their administrative processes as the information source for this research.

Chapter Two will outline the literature review for this thesis, summarising general regulatory theories and prior research evaluating participation in rulemaking. It will distil the broad disciplines of regulation to focus on theories relevant to participation, exploring Croley’s (2008) administrative process theory in detail. Chapter Three will detail the development of the methodology including the theoretical perspectives used, data collection and analysis methods applied.

The following two chapters will then describe the analysis applied to data derived from 192 proposals submitted through the administrative processes of the Australian Building Codes Board. Chapter Four will cover the analysis of research questions related to rulemaking theories. Chapter Five will address the research questions related to current practices and the objectives of the Australian Building Codes Board.

Chapter Six will discuss the findings from the analysis of the research questions in relation to the purpose and aim of this research. The discussion will extend current rulemaking theory by proposing a new participatory landscape, consider its implications for the practices of the Australian Building Codes Board and propose changes to current administrative processes. Chapter Seven will conclude the thesis, reflecting on the findings and locating them in the context of their contribution to theory, practice and research.
Chapter 2. Literature Review

2.1 Chapter Outline

Chapter One located this thesis within the broad topic of regulation and focused on the specific activity of rulemaking delegated from the legislature to the administrative agencies of government. This literature review chapter builds on that focus in the context of the research aim to evaluate the influence of administrative processes on actor participation in rulemaking.

The literature on participation in regulatory decision making and rulemaking explores its democratic legitimacy and the potential problems of unbalanced participant influence. The role of participants will be explored from their influence on decision making, societal perceptions of their role, and the type of information they bring to the rulemaking agencies.

An overview of the theoretical landscape will outline established regulatory philosophies and their association with administrative rulemaking. Informed by a review of interest theories of regulation from pluralistic views through to regulatory capture, the research will then concentrate on public interest theory, its place in institutionalism, and the role of institutions or government agencies in rulemaking. The study of institutionalist theory will focus the literature review on the practical implementation of Australian building regulations and will establish the relevance of Croley’s (2008) administrative process theory as a theoretical context for this research.

The processes used in setting Australia’s building code operate under procedures established by legislation. In addition to reviewing scholarly literature, this chapter will also explore legislative and regulatory processes, government reports, and documents guiding the operation of executive government. In doing so, the practical application and current implementation of rulemaking will be related to the theoretical and empirical scholarship.

2.1.1 Structure of this Chapter

This literature review is structured into three broad areas; participation in rulemaking, the role of information in decision making, and regulatory theory. Participation will identify the types of actors in rulemaking literature, their grouping into segments, and their effect on transparency and democratic legitimacy. Administrative agencies of government, interest groups and the general public are actor segments which will be reviewed in greater detail.

The role of information; how it is sourced from participants, and its effect on the way rulemaking decisions are reached will then be explored. The literature on the link between participants and the
information they provide will be considered in relation to the role of administrative processes balancing expert views and societal perspectives.

The influence of participants, the potential conflict between views, and the challenge of balancing these views in rulemaking will be examined and related to established interest theories of regulation. Current regulatory theories will be used as a perspective for a review of current practices and to position the empirical research in this study. The literature review will conclude by summarising gaps in current knowledge and the calls by prior scholars for further empirical study of issues within rulemaking.

2.1.2 Predominance of United States Based Literature

In framing the research problem, Chapter One established a similarity between the administrative processes used to set Australia’s building code and those in the U.S. Administrative Procedure Act (1946). The U.S literature was seen to offer the main theoretical insights for this thesis. However, other international jurisdictions also delegate rulemaking to executive government (Morgan & Yeung 2007), so the focus on U.S. practice and scholarship in preference to other rulemaking domains requires justification.

Morgan and Yeung report that ‘literature on regulation, in the English language at least, is largely American inspired’ (2007, p. 61). The U.S. Administrative Procedure Act (1946) provides a stable administrative process (Kerwin 2003) and a large scale of rulemaking activity for study, with ‘administrative agencies in the United States finalising over 2,800 rules in 2013, regulating virtually every corner of American life’ (Figueiredo & Stiglitz 2015, p. 2).

By contrast, jurisdictions outside the U.S. offer less opportunity for coordinated study as the legislative instruments and the processes for delegating the authority to make regulation differ across international jurisdictions (Administrative Review Council 1992; Baldwin, Cave & Lodge 2012; Kerwin 2003). In Europe, not all agencies engage in administrative rulemaking (Chiti 2013), different national patterns exist and ‘distinct national configurations abound’ (Morgan & Yeung 2007, p. 65). Rulemaking agencies are not ‘subject to a really common procedural framework’ (Chiti 2013, p. 93) and differences in the ‘system of interest and intermediation’ exist across countries (Dur & Mateo 2013, p. 661).

The predominance and scale of U.S. rulemaking along with the depth of associated literature establishes a knowledge base for this research to enable evaluation of Australian rulemaking. The long-term stability of the U.S. Administrative Procedure Act (1946), and its similarity to the Australian process, reduces the number and influence of external variables on findings. These
variables are further reduced by the focus on only two countries, thus minimising process variability across multiple jurisdictional boundaries.

This approach is supported by a previous Australian study comparing the Australian and U.S rulemaking systems (Coombs 2002). Although the two systems developed along different lines (Coombs 2002), the U.S. emphasis on consultation can inform Australian practice, as Coombs suggests that ‘a number of innovative aspects of the U.S. system can and should be adopted to rulemaking’ in Australia (2002, p. 40).

Discussion of the international literature supporting the focus on the U.S Administrative Procedure Act (1946) in this research is located in Section 3.4.3. The relevance of this Act to the specific processes for developing the Australian building code is explored in Section 3.4.4 with the similarity between each established in Section 3.4.4.3.

The predominance of analysis about rulemaking in the U.S. in the relevant literature, the shared aspects of consultation and openness, the similarity of the systems, and the applicability of U.S. findings to Australian practice, justify the two-jurisdiction focus of this research.

2.2 Participation in Rule Making


Sourcing information to inform regulation is a problem (Breyer 1982), with participation, information and rulemaking processes difficult to separate (Bingham, Nabatchi & O'Leary 2005; Kerwin 2003). Participants bring information to the rulemaking process (Furlong 1997; Golden 1998), including findings based on scientific literature and domain specific expertise, through to evidence based on public perceptions and societal expectations (Yackee 2014). The Australian building code performs multiple functions as a technical document, a regulatory document and a social document setting minimal standards (Productivity Commission 2004). Therefore both government aspirations and academic theory indicate that the processes used in the development of a building code should allow for the inclusion of information from technical experts, regulatory experts and those representing societal expectations.
This literature review will consider participation in rulemaking from the perspectives of its role in legitimising the process, while considering the role of the actors who participate, and the relationships between those actors, the information derived from their participation and the processes under which they participate.

2.2.1 Participation, Transparency and Democratic Legitimacy

Providing the opportunity for participation can bring a level of democratic legitimacy to rulemaking by non-elected executive government (Bingham, Nabatchi & O’Leary 2005; Kerwin 2003; Stewart 1975). It is recognised as important to the transparency of the process (Croley 1998, 2008; Kerwin 2003) leading to increased trust in administrative agencies (Rein 1983). Pidgeon argues that the requirement for the public to provide ‘judgements of risk and acceptability’ supports the role of participation (Pidgeon 1998, p. 12) as does Stewart’s summary that collective decisions need to be resolved ‘while adhering to the deeply rooted principle that an individual should be represented in some fashion in decisions that seriously affect his welfare’ (Stewart 1975, p. 1811). The procedures through which collective consent is obtained for a course of action must be acceptable to those who bear its consequences. In addition, the principles used to apportion liabilities for an undesired consequence must be acceptable to those affected, and institutions that make these decisions should be worthy of fiduciary trust (Rayner & Cantor 1987). Retaining the trust of those affected is a fundamental issue in rulemaking (Rein 1983).

Providing the opportunity for a public voice in administrative processes can address democratic concerns for making laws outside the legislature (Bingham, Nabatchi & O’Leary 2005; Furlong & Kerwin 2005; Kerwin 2003; Stewart 1975). The legitimacy of administrative rulemaking operating outside the direct control of the legislature is questioned (Freedman 1998). Although these questions are acknowledged in rulemaking literature (West 2005, 2009), the development of regulation supported by relevant interests is contended to ‘have the political legitimacy that regulations developed under any other process arguably lack’ (Harter 1982, p. 7). The role of participation in providing this legitimacy is supported by Furlong and Kerwin’s argument that the procedural element of rulemaking ‘serves, in effect, as a substitute for the electoral process that bestows constitutional legitimacy on legislation’ (2005, p. 354). The U.S. Administrative Procedure Act (1946) ‘fundamentally altered the relation of citizens and stakeholders to the governance activities of administrative agencies’, with the ‘notice and comment’ process creating ‘an explicit and legitimate voice for citizens’ (Bingham, Nabatchi & O’Leary 2005, p. 550). It follows therefore that participation in rulemaking is recognised as an aspirational goal for the regulator (Bingham, Nabatchi & O’Leary 2005; Daley 2012).
Both U.S. and Australian legislation requires rulemaking to include opportunities for participation by those affected by the regulatory outcomes. The U.S. Administrative Procedures Act (1946) mandates opportunities for the submission of written comments in response to a proposed rule, a provision described as ‘one of the greatest inventions of modern government’ (Davis 1969, p. 65). While allowing agencies freedom in the way they meet that requirement (Kerwin 2003), rulemaking emphasises open consultation in development of final rules (Coombs 2002; Wagner 2013).

In Australia, the Commonwealth Government’s Best Practice Regulation Handbook states a commitment to consultation during regulatory development, requiring ‘effective consultation with regulated parties at all stages of the regulatory cycle’ (Office of Best Practice Regulation 2007, p. 39). This commitment stems from an Administrative Review Council (1992) report which criticised delegated legislation for not receiving the same level of public exposure as primary legislation, arriving at a view that Australia should have statutory provisions for consultation when delegating legislative rulemaking powers to the executive. Summarised as ‘consultation prior to law making is consistent with the principles of procedural fairness’ (Beltz 1992, p. 52), the Council’s findings led to development of Australia’s Legislative Instruments Act (Cth) 2003, which encourages ‘rule-makers to consult with experts and people likely to be affected by proposed legislative instruments – in particular where instruments are likely to affect business or restrict competition’ (Australian Government Solicitor 2014).

Finally, participation in rulemaking ensures the transparency of the process. Black’s (2002) definition established in Chapter One confirms that setting rules is only part of the process, with the main aim of regulation to implement the rule in practice, and thereby modify behaviours to enact the policy position. The transparency of participation during rulemaking can assist this transition to implementation by providing administrators with societal feedback regarding potential problems (Kerwin 2003). This feedback can alert agencies to difficulties that may be seen once the rule is implemented, thereby providing legislative oversight (McCubbins, Noll & Weingast 1987).

This literature review has found general agreement that public involvement is an aspiration for those developing regulation (Bingham, Nabatchi & O’Leary 2005; Daley 2012). However, where it seeks to provide democratic legitimacy (Kerwin 2003; Stewart 1975) and gain the trust of those affected by regulatory outcomes (Rein 1983; Sjoberg 2001), there are views that ‘participation is limited to those who can command attention’ (Croley 2008, pp. 138-9). Empirical studies in the U.S. have found differing views on the level, balance and effect of public participation (Rinfret & Cook 2014b) with a need for agencies to play a more active role informing groups affected by regulation of the opportunities for them to participate (Golden 1998). Croley disputes this, concluding that ‘claims
about the inevitability of regulatory failure due to regulated parties’ privileged access to regulatory decision makers are untenable’ (2008, p. 167). He argues that the administrative procedures used by regulators can level this playing field, influencing which actors participate (Croley 1998).

While governments aspire to ensure participation in rulemaking, studies show that simply inviting participants may not effectively achieve that goal. The topic of who participates, and the balance between different types of participants is more complex.

### 2.2.2 Identification of Participating Actors

The study of participation and the identification of actors are intertwined (Furlong & Kerwin 2005). Rulemaking research is often specific to a particular regulatory domain (Kamieniecki 2006b) which results in differing terminology to describe actors (Houle 2010) with no agreement on their categorisation (Daley 2012). While empirical research measures who participates in rulemaking (Golden 1998), it can be difficult to identify those parties affected by regulations, and therefore challenging to identify potential participants in the rulemaking process (Daley 2012). The types of actors are dependent on the ‘particular social, economic, and political dynamics surrounding the rules’ (Kamieniecki 2006b, p. 16), with business groups, professional associations, and the general public each applying differing strategies to influence regulatory outcomes (Dur & Mateo 2013). Prior researchers have adopted a range of approaches in identifying and grouping actual and potential participants in rulemaking processes (Houle 2010; Rinfret 2011; West 2004; Yackee 2014). This section will review those approaches to inform the selection of methodology for this research.

Early rulemaking researchers (Furlong 1997; Golden 1998) developed their participant models from the influence of organised interests on the U.S. Congress and democracy, and the literature on the ‘iron triangle’ formed by Congress, the federal agency, and interest groups (Adams 1981). These studies focused on participants who mobilised into groups with the capability and resources to influence decision makers, such as trade associations, unions, citizen groups, and industry groups (Furlong 1997; Golden 1998).

Later research extended the range of participation and developed more complex segmentation models. Government participants were added, divided into federal, state, municipal, and government affairs representatives (Furlong & Kerwin 2005). The influence of private interests was split to identify specific influences from corporations and financial institutions (Furlong & Kerwin 2005). Golden (1998) added to the understanding by identifying her approach to the grouping of participants used in analysis. She explored differentiation between individual citizens and citizen groups, and the subtlety of discerning trade associations with their responsibility to industry, from professional associations with behaviours moderated by their discipline. A common factor of these
early empirical studies is their focus on actors who were active in their area of research interest. Potential participants, who may be affected by regulatory outcomes but who were not active in rulemaking processes, were not considered.

An alternative theoretical approach is to first ascertain the type of information required by rulemaking agencies, and then identify the types of potential participants who can provide that information requirement in what may be defined as an ‘informational approach’. Breyer (1982) applies this method, describing the challenge of sourcing information for use by decision makers as the major problem facing standard-setting agencies. Considering actors as potential information sources broadens the study beyond those actors who actually participate, to capture potential participants who may provide the required information. Using this approach Breyer identifies key participants as ‘industry, government staff, independent consultants, academics and consumer groups’ (1982, p. 109). Breyer’s list includes expert information from consultants and academics, differentiating such information from Furlong’s (1997) and Golden’s (1998) focus on influence-based information from interest groups. Distinguishing participants who provide expert evidence from those influencing regulation with other values-based information is an important and recurring theme throughout this research.

Interest group and informational studies focus on external participants, but do not explore participation from within the administrative agencies itself. The importance of not anthropomorphising this group, and of delving below the collective noun of agency, is reinforced by Croley’s (2008) assertion that ‘what has been famously said of Congress, that Congress is a they not an it, applies with equal force to administrative agencies’ (Croley 2008, p. 267). There are two distinct approaches to the treatment of administrative agencies in U.S. rulemaking literature. They are viewed either as a collection of active participants, with individual agency personnel considered actors in the process (West 2004), or alternatively they are seen through the lens of pluralistic regulatory theories where members of these agencies are viewed indistinguishably as independent arbiters between external participants in the rulemaking process (Golden 1998). West’s (2004) perspective of considering each agency member as an active participant is seen to align more closely with Croley’s (2008) administrative process theory orientation used in this research. This approach allows evaluation of the influence of potentially competing perspectives from actors within the administrative agency itself.

The diverse approaches evident in prior research in this area indicate the importance of selecting a research methodology which is suited to capturing the range of actors in Australian building regulation. To evaluate the influence of administrative process, the research must include individual
groups within the rulemaking agency itself, actual external participants, along with potential participants that may currently be excluded from the process or dissuaded from participating. The existence of tension between expert views and the perspectives related to societal expectation indicates the relevance for this research of Breyer’s (1982) informational approach. The segmentation of participants into groups is a prerequisite for research on participation (Croley 1998) and applied at early stages in prior rulemaking research (Furlong 1997; Golden 1998). However, the diversity of approaches highlights the need for diligence in ensuring any analysis clearly identifies the reasoning for the selection, characterisation, and categorisation of participants in the administrative process. To address this in relation to the area of Australian building regulation studied in this research, the first stage of the analysis process in Chapter Four will be dedicated to this task by developing the list and the grouping of actors used throughout this research.

2.2.3 Summary of Section 2.2
In rulemaking, the processes, participation and information are difficult to separate (Bingham, Nabatchi & O’Leary 2005; Kerwin 2003) with the literature indicating that the study of process is as important as the study of participants (Croley 2008). Given that rulemaking by administrative agencies occurs beyond the direct control of elected officials, participatory opportunities can provide democratic legitimacy to the process, offering a voice for those affected. Participation in rulemaking is therefore a stated aspiration for both the U.S. and Australian governments.

While acknowledging the role of participation in democratic legitimacy, the literature shows less agreement on the question of who can participate, the level of that participation and the balance between types of participants. Identification (Houle 2010) and grouping (Daley 2012) of actors is difficult, with a number of approaches and research methodologies evident in prior studies. This research will take an informational approach, suited to identification of both current and potential participants, who are not necessarily yet active, in setting Australia’s building code.

2.3 Interest Group Participation
Having reviewed participation in general terms, this literature review will now investigate the specific types of participants. Prior studies have distinguished between interest groups and the general public (Furlong 1997; Golden 1998). As this research will focus on the tension between the influence of expert views and societal expectations in rulemaking, this review will consider the activities and outcomes of participation from the perspective of those two groups.

The origin and development of regulation can be categorised according to interest theories, distinguishing between public interest, interest groups, and private interests (Baldwin, Cave & Lodge 2012). This categorisation is based on whether the drivers of regulation development seek to
promote the interests of the public, of organised groups, or of private interests. Interest groups are effectively defined as any group which organises with the intention of influencing public policy (Kerwin 2003). In reaching this definition, Kerwin (2003) does not classify the types of actors who organise to form these groups, acknowledging they may be individuals; members of institutions, businesses or unions; or even representatives of other levels of government. Although the analysis phase of this research will narrow this definition to identify specific interest groups participating in Australian building regulation, Kerwin’s (2003) broader description is adopted for the purpose of this literature review.

2.3.1 Drivers of Interest Group Participation
Where the opportunity exists, interest groups actively participate in administrative rulemaking processes (Croley 1998; Golden 1998; Rinfret & Cook 2014b). Furlong’s (1997) finding ‘that a large majority of responding organisations considered rulemaking influence very important to their policy goals’ (Furlong 1997, p. 339) is echoed in Kerwin’s conclusion that ‘participation in rulemaking appears to be a priority for many different types of groups’ and ‘both business and non-business organisations have found good reasons to invest their time and energy in rulemaking’ (Kerwin 2003, p. 184).

Stigler’s (1971) theory on the economic supply and demand of regulatory outcomes suggests that interest groups will participate where they expect returns greater than their costs of participation. Combining Stigler’s (1971) theory with Furlong (1997) and Kerwin’s (2003) findings, suggests that interest groups active in rulemaking benefit from regulatory outcomes that exceed their efforts and costs of participation.

Interest groups also seek to influence administrative rulemaking when legislative pathways are blocked by competing interests (Kamieniecki 2006b). The role of administrative rulemaking in overcoming ‘the current environmental policy making quagmire’ (Rinfret & Furlong 2012, pp. 372-3) is highlighted in relation to climate change, where rulemaking is seen as ‘one pathway around this congressional policy gridlock (Rinfret & Cook 2013, p. 3). This driver aligns with Rein’s (1983) theoretical contribution to regulatory development, as he proposes that where interest groups are excluded from the policy setting arena, they will subsequently attempt to modify those policies to suit their excluded interests during implementation phases.

2.3.2 The Influence of Interest Group Participation
While rulemaking is important to interest groups (Furlong 1997) and their continued participation suggests they achieve regulatory outcomes that exceed their cost of participation (Stigler 1971), researchers still look to answer the question of whether, on the whole, interest groups are
successful in influencing an agency’s decisions. This question is posed repeatedly in theoretical
development (Stewart 1975; Stigler 1971), early empirical studies (Furlong 1997; Golden 1998), and
more recent research (Rinfret 2011) in this area.

The amount of influence exerted by interest groups, the extent of that influence, and whether the
level of influence is related to the amount of public comment, are all under question (Kamieniecki
2006b; Nixon et al. 2002; West 2009). Some studies on U.S. rulemaking find that agency officials are
responsive to organised interest groups (McKay & Yackee 2007) and that their submitted comments
influence the rules (Yackee & Yackee 2006), while others find little effect (West 2004) or indicate
agency bias towards the supporters, rather than critics, of proposed rules (Golden 1998). Leading
scholars self-report examples where their findings in this area conflict with previous studies or
conventional wisdom (Golden 1998; Nixon et al. 2002; Yackee & Yackee 2006). To capture the
differing positions, this literature review categorises works into the ‘yea’ scholars, those concluding
that interest groups can exert an influence over agencies, and the ‘nay’ scholars who suggest that
such an influence does not exist.

Supporting the ‘yea’ view, that administrative agencies are influenced by participation, McKay and
Yackee hypothesised that ‘the squeaky wheel gets the grease’ (2007, p. 337). Evaluating influence
by measuring changes in regulatory stringency, they found that ‘the direction of change desired by
the majority of commenters is generally realised in the final rule’ (McKay & Yackee 2007, p. 345),
concluding that ‘the concerns of the affected population - when they take the time to submit written
comments to agency officials and when others are also active in their cause - do seem to make their
way into agency rules’ (McKay & Yackee 2007, p. 351).

Considering the question of influence from the perspective of the administrative agency also
identifies the positive aspects of external participation. Studying the mechanisms to promote
involvement in rulemaking, Woods (2013) finds ‘administrative procedures designed to open the
regulatory processes up to outside interests do have a systematic effect on the substance of
environmental policy’ (2013, p. 591). When these decision making processes of agencies work
correctly, the decision makers are both better informed and more accountable (Wagner 2013).
Agencies take the comments received through the process ‘very seriously indeed’ (2003, p. 202) and
whether from the interest group or agency perspective, participation achieves change in the
outcomes (Kerwin 2003). Interest groups ‘consider themselves quite successful in achieving their
objectives’ (2003, p. 206) and agencies ‘acknowledge their presence, listen attentively to what they
have to say, and are convinced by their arguments with some degree of regularity’ (2003, p. 206).
Counter to this, a range of researchers in the literature find a ‘nay’ view, arguing that interest groups or business interests do not have any preferential position in changing the views of a rulemaking agency. Collecting data from direct interviews with agency officials involved in rulemaking proceedings, West (2004) finds that public comment processes usually occur in response to a specific proposal, as opposed to ‘open ended solicitations of policy recommendations’ (2004, p. 69). From a study of 16 rules by eleven rulemaking agencies, West (2004) only found a single instance where changes were substantially driven by empirical information introduced during the public comment phase. He concludes that agencies are willing to change proposals in response to public comment, but that it is difficult and ‘occurs within relatively narrow bounds’ (West 2004, p. 71). Croley echoes this finding, observing that ‘interest groups do not get what they want from agencies, but merely less of what they do not want’ (2008, p. 133).

The ‘nay’ scholars suggest that the expertise of the rulemaking agencies and the technicality of the rulemaking domain may limit participant influence on regulatory outcomes. Kamieniecki concludes ‘interest groups have little influence over the structure and contents of proposed rules concerning environmental and natural resource issues’ (2006b, p. 17), with later research indicating the domain’s technical complexity limits the opportunity to participate (Daley 2012). Similar findings are made in the U.S. Securities and Exchange Commission where it is suggested their ‘culture of bureaucratic expertise’ is less susceptible to influence from industry (Nixon et al. 2002, p. 73) with ‘little or no evidence that the Administrative Procedures Act requirements make dominant interests unusually effective in changing the commission’s rule components, once those rules have been proposed’ (Nixon et al. 2002, p. 74).

Influence is also directional, with a tendency for agencies to favour those comments that support their proposed rule over those that are critical of it (Golden 1998). Regardless of whether the comment’s proponent is a major stakeholder or not, where conflicting views are submitted ‘comments in support of a rule were likely to get the final rule they desired, and those who objected were likely to get only minor concessions’ (Golden 1998, p. 262).

The ‘yea’ or ‘nay’ approach to interest group influence becomes blurred when interests are not homogenous. In practice rulemaking involves influence from competing interests (McKay & Yackee 2007) and frequent divisions within views (Golden 1998). When an interest group and agency disagree, or when the views of two interest groups do not align ‘some must win and some must lose’ (Kerwin 2003, p. 202). Therefore measuring the influence of one perspective may equally measure the lack of influence of another.
Thus far, this literature review has identified divergent findings as to whether interest groups affect regulatory outcomes. A consensus towards either ‘yea’ or ‘nay’ regarding interest group influence does not appear to exist, with the views of individual researchers conditional on factors including the type of participant, the technical requirements, the level of agreement with the proposed regulatory change, and whether influence is measured from the winner’s or loser’s perspective. These conditional factors may be important to this research to guide understanding of a potential actor’s decision to participate in the rulemaking processes. However, the identification of competing interests and the conditional nature of their influence introduces the question of how administrative agencies balance those interests and regulate their effect on regulatory outcomes.

2.3.3 Balance of Interest Group Influence on Outcomes
There is a tendency for researchers to focus on what is wrong with political institutions rather than identifying what is right (Croley 2008). A similar trend exists in the rulemaking literature which tends to focus on problems with influence by interest groups (Kamieniecki 2006a; Rinfret & Cook 2014b; West 2004). Although these works are not critical of participation in the rulemaking process per se, they measure attempts by interest groups to influence policy from a theoretical context that treats influence as a problem to be solved (Furlong & Kerwin 2005). Public choice theorists posit that regulatory outcomes favour interest groups over the general citizenry (Stigler 1971), with arguments extending through to the concept of regulatory capture (Makkai & Braithwaite 1998). This review will collate the negative aspects of interest group participation in rulemaking under the two broad headings of unbalanced influence, and the effect of administrative process.

2.3.3.1 Unbalanced Influence
Participation by interest groups in the translation of government policy into regulatory practice raises a question of ‘which actor dominates in the relationship amongst those who shape and implement governmental policies’ (Rein 1983, pp. 114-5). Regulatory decisions require reconciling three potentially conflicting imperatives; ‘what is legally required, what is rationally defensible in the minds of administrators, and what is politically feasible in reaching consensus among contending parties with a stake in the outcome’ (Rein 1983, p. 116). Instances where influence is not balanced amongst competing interest groups may affect the imperative for consensus, causing implementation of regulation to drift from the declared purpose of policy (Rein 1983).

The potential for unbalanced influence on the decisions of administrative agencies is a repeated criticism of U.S. rulemaking (Croley 1998; Rinfret & Cook 2014b; West 2005). Referencing Schattschneider’s observation that ‘the flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper class accent’ (1960, p. 35), Golden observes ‘there is a small cottage industry
devoted to answering the question, what accent the heavenly chorus’ (Golden 1998, p. 247). In this statement, she supports a view that the voices influencing rulemaking outcomes may be biased and implies current research is focused on identifying which voices dominate.

Yackee and Yackee’s answer to this question is that agencies ‘appear to consistently alter their final rules to reflect the comments of business interests’ (2006, p. 135), supporting Golden’s (1998) finding of a bias towards business participation. An influence advantage is also identified for interest groups more broadly (Furlong 1997), with McKay and Yackee (2007) concluding more active interest groups achieve greater changes to rulemaking outcomes and ‘agency officials respond to the preferences of organised interests [italics added] during rulemaking when lobbying is imbalanced’ (McKay & Yackee 2007, p. 350).

### 2.3.3.2 Administrative Process

The second negative aspect of interest group participation is due to the administrative process itself. Rein (1983) views administrative process as instrumental in the influence of participants, but Crole speculates domination by interest groups ‘seems more or less likely depending on the procedural opportunities available to other interests’ (1998, p. 167). Processes which simply facilitate open access to rulemaking may influence the balance of participation, but not always with desirable outcomes (Rinfret & Furlong 2012). Although this research has established that participative processes are an aspiration for governments (Administrative Procedure Act 1946; Australian National Audit Office 2014) not all scholars support this open approach.

Balanced influence may be negatively affected where administrative processes impede participation in rulemaking (Wagner 2013). Reflecting Stigler’s (1971) supply and demand model between the cost and returns for potential participants, Wagner (2013) finds information and access costs may actually dissuade participation in practice.

While acknowledging rationales for increased participation, Rossi (1997) questions the ‘fetish for public participation in agency decision making’ (1997, p. 174) in administrative law. He suggests caution with simply maximising participation, instead arguing the deliberative process could be improved by regulating participation in agency decisions. Unregulated participation, allowing access to rulemaking without administrative processes controlling behaviours, may form an adversarial system (Harter 1982). Harter (1982) proposes an alternative system of managed negotiation processes rather than open participation, with the credibility of his approach established by its translation from academic study to direct implementation in the U.S. Administrative Procedures Act (Kerwin 2003). The controlling aspects of Harter’s (1982) regulated process perhaps take regulation
closer to Houle’s (2010) musings as to whether it would be appropriate to legally mandate consultation in rulemaking.

The literature indicates a direct link between the administrative processes used by the rulemaking agency and the potential for unbalanced influence from competing interests. Authors also acknowledge that simply providing access for participants will not itself necessarily address this imbalance. Similar conclusions are found in building regulation, where although standard setting organisations provide for participation, ‘there is cause to believe that gaps in stakeholder representation exist’ (National Academy of Sciences 2003, p. 4). This gap in the understanding of current rulemaking practice frames this research agenda. The complex relationship between administrative process and participation, and the lack of agreement between scholars suggest there is a large amount ‘left to learn about the nexus of interest group influence and the power of rulemaking’ (Furlong & Kerwin 2005, p. 369).

2.3.4 Summary of Section 2.3
Interest theories of regulation identify the potential influence of interest groups on regulatory outcomes. Studies in rulemaking support these theories, finding interest groups actively participate, because they see their participation as important and as a way to progress their interests (Furlong 1997). But interest groups do not speak with a single voice. Each group seeks to promote their own interests, and those interests may not align with government policy or societal expectations. These contested positions suggest regulatory outcomes will have winners and losers, raising the question of how the rulemaking agencies and their administrative processes bring balance to decision making and regulatory outcomes.

Disagreement on how and whether interest groups actually exert influence over the outcomes of administrative rulemaking in practice (Croley 2008) is seen as a gap in current knowledge and thus an opportunity for this research to contribute to an improved theoretical picture of rulemaking. Research findings that interest groups do not influence rules are countered by other findings that influence does occur when multiple voices promote the same change, or where interests organise to present a common view. Rulemaking in technical domains with expert administrative agencies is less susceptible to industry influence, but conditional on participant expertise, where new information can affect change to regulatory outcomes. Recognising these differing views and their relationship to the context in which the rulemaking research was performed is seen as important when evaluating the influence of administrative processes on actor participation.
2.4 Participation by the General Public in Rulemaking

This section of the literature review seeks to understand whether the general public participates in rulemaking, and whether administrative process enables or encourages their participation. It will look to prior research to explore public participation, public engagement (Bingham, Nabatchi & O’Leary 2005), public influence (Daley 2012), and public perceptions (Yackee 2014).

Sjoberg concludes that ‘since interests always enter into decisions and purported rational views of the world, it appears to me to be quite reasonable that the interests of the public should rule’ (2001, p. 121). But technical characteristics dominating many areas of administrative rulemaking are seen to provide an advantage to those participants with expertise and technical knowledge in the subject matter (Yackee & Yackee 2006). A significant segment of prior academic study focuses on participation by technically expert and organised interest and business groups (Rinfret & Cook 2014b). This suggests that not only is the voice of the general public undervalued, but it is often absent when decisions are made (Wagner 2013).

2.4.1 Who Can Participate, and Who Actually Does

To evaluate the influence of administrative process on participation, distinguishing which actors have access to rulemaking from those who actually choose to participate is deemed important. As ‘understanding agency decision making fully requires consideration of citizen participation’ (Croley 2008, p. 125), this distinction is explored in relation to the general public.

2.4.1.1 Who Can Participate

In the U.S. the opportunity for public participation in rulemaking is established by the procedures of the administrative agencies, and mandated by the ‘notice and comment’ requirements in the Administrative Procedures Act (1946) (Kerwin 2003). In the Australian building code, participative opportunities are set by the combined requirements of the Intergovernmental Agreement (Commonwealth of Australia 2012), the administrative processes of the Australian Building Codes Board (Australian Building Codes Board 2012a), overriding requirements of the Legislative Instruments Act (Legislative Instruments Act (Cth) 2003), and guidelines provided by government policy (Office of Best Practice Regulation 2007). In both the U.S. and Australia, stages of the rulemaking process are open to any participants who care to participate.

However, providing access to rulemaking does not mean the public is aware of that access (Rinfret & Furlong 2012). Nor does awareness necessarily translate into active participation (Daley 2012; Yackee 2014), or participation guarantee that any participant will achieve their desired outcomes (Kerwin 2003).
2.4.1.2 Who Does Participate

The review of interest group participation presented Stigler’s (1971) theory on the supply and demand of regulatory outcomes, suggesting that for interested individuals to participate in rulemaking, they will expect returns greater than their costs of participation. A similar argument is proffered from the perspective of Wagner’s (2013) participant centred model, which indicates actors will participate in an issue when the benefits from a positive decision outweigh their costs of participation. But, do the benefits of participation by the general public, at either a collective or individual level, outweigh the costs to the participant (Woods 2013; Yackee & Yackee 2006)?

The lack of public participation in rulemaking (Golden 1998; Wagner 2013; Yackee & Yackee 2006) suggests that the general public is not receiving the regulatory returns proposed by Wagner (2013) and Stigler (1971). In her review of comments to the rulemaking process, Golden finds ‘a striking absence of citizen representation’ (1998, p. 255). Wagner concludes ‘a dearth in public interested representation relative to regulated industry’ (2013, p. 680), finding the absence of public participation ‘provides particularly compelling evidence of participatory imbalances’ (2013, p. 680) in relation to business or interest groups. However, these findings are complicated by a possible lack of awareness about the potential for involvement (McKay & Yackee 2007), or perceived lack of effectiveness of any contribution (Yackee 2014).

In response to the absence of public participation, rulemaking scholars have called on administrative agencies to be more proactive in encouraging, as differentiated from simply allowing, participation (Croley 2008). ‘Agencies can and should do a better job of listening to, and even soliciting, meaningful participation from all interests (Coglianese, Kilmartin & Mendelson 2009, p. 931), and ‘public managers ought to facilitate greater citizen engagement in the work of Government’ (Bingham, Nabatchi & O’Leary 2005). Furlong and Kerwin ask ‘can participation in rule making provide a means for renewed citizen engagement in the policy process’ (2005, p. 369)?

This literature review has established that public participation in rulemaking is an aspiration of government (Bingham, Nabatchi & O’Leary 2005; Daley 2012), that current administrative processes allow participation (Kerwin 2003), and scholars are calling on administrative agencies to better encourage participation (Coglianese, Kilmartin & Mendelson 2009; Croley 2000, 2008). But empirical research finds the general public are absent (Golden 1998). This may be due to factors of awareness or access, but may also be related to more complex mechanisms of information capacity.

2.4.2 Information Capacity

While studies have considered the role of public participation in rulemaking (Daley 2012) and the balance between business and public influence (Yackee & Yackee 2006), there is little research on
what influences or motivates public participation. In one of the few studies investigating why the public make the effort to participate, Yackee concludes that while there is extensive literature on ‘efficacy in political science’ and ‘responsiveness and accountability of public agencies’, ‘scholars have little information on whether citizens active during rule making believe their efforts can, and do, influence regulatory policy decisions’ (2014, p. 428).

Yackee (2014) investigates whether the general public believe they have a meaningful role in the rulemaking process, arguing that this belief is needed to facilitate participation. External efficacy is defined as whether a person believes an agency is responsive to their participation. In this, she finds a perceived advantage for business interests over citizen input (Yackee 2014). It is important to note that in reaching this finding, Yackee (2014) measured perception rather than attempting to establish actual bias in the rulemaking outcomes, arguing that a perception of bias can be a disincentive for an individual to participate in the rulemaking process. West identifies factors which may lead to an individual participant’s perception of rulemaking, proposing that ‘notice must be effective, comment must occur, and agencies must be influenced by that comment in arriving at their final decisions’ (West 2005, p. 661).

Internal efficacy is a participant’s perception of their competence to influence the outcomes (Yackee 2014). Yackee’s view was developed from a qualitative survey of 388 citizens who participated in healthcare rulemaking, finding that a person’s knowledge or expertise form an ‘important predictor of perceived voice during agency rulemaking’ (Yackee 2014, p. 442). Similar findings are also evident in environmental regulation where for example complex technical aspects of the topic limit the ability for the general public to contribute to the discussions (Daley 2012). Croley states this concept from an informational perspective, arguing that the ‘currency’ of administrative decision making is information, and ‘those groups with the best, most credible, information have a greater opportunity to influence decision makers’ (Croley 2008, p. 135).

Yackee defines the term ‘participant information capacity’ as ‘a person’s ability to bring technical and information based arguments to the agency decision making process’ (2014, p. 428). The influence of information capacity is directly relevant to research on Australia’s building regulation, where information based on findings from science and engineering appears to have greater currency.

2.4.3 Summary of Section 2.4

This literature review has established that although government may aspire to include the general public in rulemaking, the voices of experts dominate. Administrative systems that allow the public access to rulemaking do not necessarily translate into active participation. While actual levels of
public participation are far from clear in current studies (Kerwin 2003; Rinfret & Cook 2014b; West 2005), the findings indicate their absence (Golden 1998).

The distinction between those who can and those who do participate is of importance to this research. The difference between these two groups provides an analytical window on those factors and conditions that may influence participation.

Yackee (2014) proposes a lack of ‘information capacity’, which she describes as a ‘person’s ability to bring technical and information based arguments to the decision’ (2014, p. 428), as one potential condition affecting the public’s perception of ‘voice’, and therefore determining their decision to participate. This finding reinforces Kerwin’s view that ‘information and participation cannot be separated’ (2003, p. 56). These views guide the inclusion of participation by the general public, the effect of information capacity and the role of information, onto the agenda for this research. Information capacity reinforces the tension between the contribution of expert views and the inclusion of perspectives based on societal expectations in decision making explored in section 2.2, and it also contributes to the question of how that information is used in decision making.

2.5 The Role of Information in Decision Making

Most members of society are not expert in building regulation, but they live and work in buildings and their expectation of building performance may be important to rule makers. Those setting regulation need to balance scientific judgement with values (Pidgeon 1998) and seek the best way to achieve this balance. This notion influences this research exploring participation in rulemaking towards a focus on the differing sources of information and the relationship between them. Kerwin’s (2003) view that information and participation are linked indicates that an understanding of the role of information in administrative process and understanding how it affects rulemaking decisions is directly relevant to this research on participation. This topic will be approached by reviewing the role of experts and community members in influencing regulation, the challenge of finding balance, and the problems that occur when their views do not align.

Two information flows are identified between administrative agencies and rulemaking participants. Administrative bodies share information to alert those who may benefit by, or be burdened by the regulatory outcomes and to provide opportunity for feedback (West 2009). They also seek input and information in order to set regulations (Kerwin 2003). These two flows are related, where sourcing information from participants is not possible without the rulemaking agency first sharing information of their rulemaking intent (Kerwin 2003).
Breyer illustrates the importance of receiving appropriate information in setting regulation, classifying it as ‘the central problem for the agency engaged in standard setting’ (1982, p. 103). Information is linked to participation through an observation that ‘we would expect participation to be the single most important element in rulemaking, for it is through this device that bureaucrats learn what these varied interests want’ (Kerwin 2003, p. 202). The reference to ‘varied interests’ suggests differences in the type of information contributed by those possessing these varied interests. The benefit from broadening the available information by allowing participation in the decision making process is evidenced by Pidgeon’s finding that ‘extending the peer community can be expected to offer a far better understanding of the problems of risk assessment and management than by conventional analysis alone’ (1998, p. 13). Pidgeon clarifies the problem posed by Breyer (1982), warning that ‘balancing and integrating the best available scientific judgements and evidence on the one hand with aspects of ethical values on the other hand, is perhaps one of the most difficult questions to be faced by democratic governments and their regulators today’ (1998, p. 5).

While all jurisdictions have building codes covering public health and safety, some countries extend ‘requirements to include matters of comfort and convenience’ (Atkinson 1973, p. 284). This is the case in Australia, where the Intergovernmental Agreement (Commonwealth of Australia 2012) requires the Australian Building Codes Board to set rules covering both the safety and amenity of occupants in Australian buildings. This extends the Code’s scope beyond the remit of the scientist and engineer ensuring safety, to evaluation of societal expectations of amenity (Fellows 2010; Rabeneck 2008), and further establishes that scientific, engineering and societal based viewpoints may all inform rulemaking decisions in building regulation. Therefore, the roles of differing information types in setting rules is relevant to the academic study of rulemaking and its application to Australia’s building code.

2.5.1 The Roles of Scientific Expertise and Societal Values

 Australians have a high level of interest in science and technology, with 80% of studied respondents agreeing that science is important to solving many of the problems facing society (Searle 2014). However, Croley argues that ‘good well-argued information is valuable’ regardless of its origin (Croley 2008, p. 136). Counter to this proposition of valuable information, West observes that ‘key issues in rulemaking are often not factual at all’ (2005, p. 660), explaining his statement by distinguishing what is factual from that which is equitable, or what is wanted. The views of these few authors indicate the complexity of information and the tension between the roles of experts and society in rulemaking.
Rulemaking influence is skewed towards the views of experts. Participants with more credible information have increased influence over decision makers (Croley 2008, p. 135), with a growing trend towards science-based decision making (Brooks 2013) and governments eager to look for science-based policy and regulation (Rutter 2012). Strong opposition to a proposed rule can fail ‘when the agency feels scientific consensus exists in support of the proposed action’ (Kamieniecki 2006b, p. 17) with the level to which administrative agencies rely on scientific evidence to justify their decisions, described as remarkable (Kamieniecki 2006b).

Sections of the Australian government argue that allowing societal views to inform decision making will drive increased regulation. The Chairman of the Australian Regulation Taskforce states that community tolerance to risk is much lower than three decades ago, as growing prosperity, technological progress, and new information drive increased societal expectations in the area of health, safety and the environment (Banks 2005). The Productivity Commission finds anti-competitive effects result from Australian standards moving towards ‘best practice’ rather than minimum requirements (Productivity Commission 2004, p. 261). In the judiciary, informative, as opposed to normative, standards are being referenced as mandatory provisions in civil proceedings (Productivity Commission 2004). These views are apparent in current administrative practice, with a review into building regulation recommending ‘community expectations’ be removed from the mission statement of the Australian Building Codes Board (Productivity Commission 2004, p. xxv). In justifying this recommendation, the Commission argued that community expectations may not correlate with the greatest risk to safety, fail to provide the solution with the greatest net benefits, and may not relate to what the community is prepared to pay for (Productivity Commission 2004).

Not all agree with the exclusion of societal views from building regulation. Expectations regarding a building’s performance are extending to include social wellbeing and societal expectations ‘within social, cultural and economic boundaries’ (National Academy of Sciences 2003, p. 4). This view is also reflected in the Victorian Bushfires Royal Commission which found that implementation of its recommendations will not only require cooperation among local, State and Commonwealth governments, but also that ‘individuals and households have an important role to play’ (Teague, McLeod & Pascoe 2010, p. 406).

Weighing the role of formal analysis enacted by experts and the role of societal perception leads Pidgeon (1998) to conclude that none of the arguments against using societal perception are ‘so dominating as to rule this out’ (1998, p. 12). He recommends that efforts should be made to optimise the way these perception judgements are obtained (Pidgeon 1998). There are also calls for more effective input from those impacted by building regulation. A report from the National
Academy of Sciences warns that ‘if this is not done, key stakeholder groups, such as the public may be underrepresented, leading to divergence in expected and actual performance’ (National Academy of Sciences 2003, p. 4).

Aligning with these calls for public participation in setting building regulation, academic findings that suggest decision making should be informed by a balance between the views of scientific experts and societal values are widespread (Rayner & Cantor 1987; Sjoberg 2001; Slovic et al. 2004; Sundlof 2000). The value-neutral nature of science and its focus to specifically minimise the influence of values is problematic if used as a ‘sole guide to decision making’ (Sundlof 2000, p. 137). But combining expert and societal viewpoints cannot be dealt with as a two stage process, where the facts are analysed by experts, and then evaluated in the social context (Rayner & Cantor 1987). Instead, an interdisciplinary approach is proposed where evaluation takes place in a socio-political context where decisions are as much about social relations as the evaluation of facts (Rayner & Cantor 1987). A similar view is reflected in literature specifically discussing the delegation of rulemaking outside the traditional legislative process, which identifies requirements for broad sources and types of information to allow regulation to provide collective social and political responses to a problem (Sheehy & Feaver 2015).

This argument for societal participation, particularly where regulation is delegated outside elected officials, introduces the democratic perspective. ‘A democratic society should reflect the will of the public [and] widespread public participation in decision making is one consistent mechanism to ensure an accurate reflection of public preferences’ (Daley 2012, p. 492). However, democracy in rulemaking does not translate to the concept of proportional representation, with Kamieniecki (2006b) identifying that the process is not seen by regulators as simply counting votes on their proposed rules. Administrative agencies take a number of factors into account, including the size and importance of the organisation providing the information, the importance of individuals, and whether new information or data is submitted (Kamieniecki 2006b).

If administrative processes are to evaluate factors beyond proportional representation, they must ensure a balance between expert analysis and societal perceptions, and also address the complexity when those two views are in disagreement preventing consensual decisions (Sundlof 2000). Slovic (1999) explored this theme, finding that ‘risk assessment is inherently subjective, representing a blending of science and judgment with important psychological, social, cultural, and political factors’ (1999, p. 689). Developing this finding through the theoretical lens of risk perception, Slovic et al (2004) characterised ‘risk as feelings’ to describe the instinctive and intuitive, and ‘risk as analysis’ to describe scientific deliberation and reason. Where these two fields of risk clash, they introduce a
third reality in ‘risk as politics’ (Slovic et al. 2004). The Victorian Bushfires Royal Commission demonstrated this theory in Australian practice, as it criticised building regulators for leaving policy decisions of fire severity with a committee of expert volunteers rather than setting clear policy (Teague, McLeod & Pascoe 2010). Environmental rulemaking identifies similar conflicts which emphasise the ‘tension between scientifically informed decision making and democratic ideals…’ (Daley 2012, p. 489), resulting in ‘…a consistent effort to insert more public values into technical aspects of environmental decision making’ (2012, p. 491).

It is noted that rulemaking literature may refer to information and views brought by community or society participation in a number of ways. For example public preferences (Daley 2012; McCubbins, Noll & Weingast 1987), societal values (Rossi 1997; Sundlof 2000), expectations (West 2004), attitudinal setting (Baldwin & Black 2008) and ethical values (Pidgeon 1998) are all evident. The Australian Building Codes Board refers to ‘societal needs and expectations’ (Commonwealth of Australia 2012), while the Office of Best Practice Regulation (2007) tends towards community expectations. This thesis does not seek to undertake a sociological exploration of the differences between each author’s terminologies. Instead, it is noted that rulemaking literature generally differentiates societal or community input as bringing information to rulemaking which is outside of that contributed by experts in the domain. This generalised context is used in this thesis.

The specific role of experts in rulemaking is also complex, with much of the literature reviewed considering scientific, technical or engineering expertise. However, the influence of experts also includes those who are expert in setting regulation or applying administrative process. Rein (1983) recognised this expertise in his identification of legal, rational, and consensual imperatives, where potentially conflicting issues between each leads to questions on the conceptual basis used to reach decisions. Evaluating the regulation of a potentially carcinogenic chemical in the food industry, Shrader-Frechette (1998) evaluated whether decision makers should minimise Type-I errors, reducing industry risk, or minimise Type-II errors, reducing public risk. Highlighting the conflict between rejecting a decision on safety grounds, making industry less competitive, or accepting it with an uncertain public risk, Shrader-Frechette (1998) notes that scientific principles favour reduction of Type-I errors, while criminal law leans to Type-II errors, in line with the concept of ‘innocent until proven guilty’. Shrader-Frechette’s (1998) distinction between scientific and legal principles parallels Rein’s (1983) conflict between rational and legal imperatives. When translating political policy to regulatory practice, the legal imperative is more likely to ‘adhere faithfully to the policymaker’s intent’ (1983, p. 119), where a process dominated by scientists is more likely to ‘challenge the legislative will where it conflicts with their interpretation of how it affects the
community’ (Rein 1983, p. 119). Differing motivations for those expert in the technical domain being regulated, from participants who are expert in setting regulation or its legal processes, increases the complexity of achieving a balance of views in practice (Pidgeon 1998).

Facilitating a collective social response requires an administrative environment that both enables and encourages participation by the relevant sections of society (Croley 2008; Kerwin 2003). This section of the literature review has identified tension between the viewpoints of scientific analysis, societal expectations, government agencies, and those expert in regulatory process or legal practice and established that the rules and procedures used to administer the rulemaking process are integral in balancing this tension. The next section considers the role of expert economic analysis in rulemaking.

2.5.2 The Role of Economic Analysis
Australia’s building code is developed in accordance with ‘best practice regulation’ guidelines (Council of Australian Governments 2007) which call for the development of Regulatory Impact Statements bringing together the regulatory problem being addressed with a formal, economic based, cost benefit analysis on a range of viable regulatory and non-regulatory alternatives (Office of Best Practice Regulation 2007). These impact statements are developed by the administrative agency responsible under delegated legislation (Australian Government Solicitor 2014), subject to formal consultation with actors affected by the regulatory change (Office of Best Practice Regulation 2007).

Proposed regulations under the U.S. Administrative Procedures Act (1946) are also subject to an economic cost-benefit review which considers the relative merits of regulatory outcomes (Kerwin 2003), setting out alternative ways of achieving an objective and justifying the selected action as better than any alternative (Breyer 1982). Oversight of this U.S. process is delegated from the rulemaking agencies to the Office of Management and Budget (Kerwin 2003). Both the Australian and U.S. regulatory impact assessment processes are similar, being formalised through legislative instruments and requiring oversight by an independent federal agency. In each case, the processes require regulatory and non-regulatory alternatives to be developed, with preferred options identified through formal cost benefit analysis.

While not necessarily palatable for the general public, the analysis in Regulatory Impact Statements applies statistical measures on the cost of a life (Office of Best Practice Regulation 2014). Financial measures of mortality risks are established in theory on risk evaluation (Hakes & Viscusi 1997; Viscusi, Hakes & Carlin 1997), and used to evaluate regulatory alternatives against net present value calculations of cash flows between the costs of lives lost and cost to the community to comply with
increased regulatory burdens (Australian Building Codes Board 2012f; Centre for International Economics 2011).

The application of economic analysis in building regulation is not new, with work undertaken for the National Bureau of Standards in the United States representing an early example of an analytical framework for specifically calculating cost and benefit impacts (McConnaughey 1978). Subsequently, a number of papers have explored this trade-off between improved safety and the cost of compliance, sometimes termed the regulatory burden (Arlani & Rakhra 1988; Williams 1995). Other international examples of building evaluation systems also focus on the safety and health of occupants. The United Kingdom Housing Health and Safety Rating System (Office of the Deputy Prime Minister 2006) describes a uniform approach to the identification and evaluation of risks stemming from deficiencies identified in dwellings.

In Australia, much of the early measurement of building regulation focussed on building safety and aspects of fire safety accreditation (Knox 1989a; Yung & Beck 1989). More recently Ashe et al’s (2009) study on the costs of fire counters this drive towards “safer” buildings within Australia by raising questions as to whether the current system is economically efficient.

The benefits of these analytical approaches and their cost-benefit drivers are not universally acknowledged. Studies have attempted to extend the simple trade-off between regulation and financial impact to encompass aspects of quality, performance and risk (Almeida et al. 2010). Gouldson, Morton and Pollard (2009) warn that care needs to be taken when overlaying economic rationalism on risk-based approaches, inferring that priority of efficiency over efficacy may contribute to regulatory failure.

With direct reference to Australia’s regulatory impact assessments, journalist Henry Ergas (2012) questions their quality raising concerns of implementation where formal impact analysis was re-worked within Government, to reach a different conclusion. This view is supported by the review of the process by the Australian Productivity Commission. It found ‘shortcomings in system design, and a considerable gap between agreed Regulatory Impact Assessment principles and what happens in practice’ (Productivity Commission 2012, p. 2).

In relation to this research, regulatory impact assessments in both Australia and the U.S. occur after the administrative agency’s rulemaking processes of drafting, participation and decision making are complete (Kerwin 2003; Office of Best Practice Regulation 2007). While acknowledging the role of economic analysis in regulatory decisions, the ex post nature of regulatory impact assessments removes it from the direct administrative processes that set the language and content of the
resultant rules. U.S. rulemaking studies have not included these processes in the scope of their research (Furlong 1997; Golden 1998; Rinfret 2011; West 2004).

2.5.3 Counterintuitive aspects of stringency
There is potential for public participation and societal expectations to drive an increase in the stringency of regulation (Banks 2006; Blair 2005). Yet in the context of research on high flood hazard areas for example, participants in the building market wanted lower safety levels than those called for by government regulators due to their failure to understand the nature of the hazards to which they were exposed (Dehring 2006). This variability in public perception, along with West’s (2005) observed prevalence of nonfactual information in decision making, indicates that public participation may introduce a complexity beyond scientific or economic analysis.

This complexity is evidenced by counterintuitive effects identified in building regulation. Increasingly stringent or prescriptive regulation has been shown to reduce the level of industry innovation thereby slowing the take-up of new technology which may otherwise lead to improvements in construction methods (Meacham 2010; Seaden & Manseau 2001). Increased regulatory stringency is also linked to decreasing, rather than increasing levels of safety. Hammitt et al (1999) describe a ‘stock’ effect, where increased construction costs arising from more stringent building requirements may suppress the replacement of older, less safe housing. This suppression of new construction results in a decreased level of safety across a country’s total building stock.

These counterintuitive effects indicate the underlying complexity of rulemaking where the value of outcomes are not always evident (Baldwin, Cave & Lodge 2012) and there is difficulty identifying what is actually in the public’s interest (Garrett 2000). If rulemaking is dominated by experts, what measurements do those experts apply to regulatory outcomes and public interest? In terms of participation in rulemaking, the answer may be found in Pidgeon’s conclusion that ‘extending the peer community can be expected to offer a far better understanding of the problems of risk assessment and management than by conventional analysis alone’ (1998, p. 13).

2.5.4 Summary of Section 2.5
While diverse arguments on the role of information in rulemaking are identified, this literature review finds consensus on a call to balance differing viewpoints and a role for participation. Achieving balance requires the procedures and principles used in rulemaking to merit the acceptance and trust of those affected by regulatory outcomes (Rayner & Cantor 1987). While there is evidence that society will place its trust in science (Searle 2014), scholars also identify instances where science and public perception do not align (Slovic et al. 2004), leading to a role for politics in decision making.
The Australian Building Codes Board sets the level of a building’s amenity in addition to traditional areas of occupant health and safety. This increased scope expands decision making beyond the domain of scientists and engineers. The role of administrative processes and procedures in both regulating and influencing participation and information flows is an important aspect of rulemaking (Croley 2000). Procedural aspects are fundamental in balancing expert views against the perceptions of the general public (Croley 2008), and instrumental in providing participants an effective voice in the outcome (Yackee 2014).

2.6 Regulatory Theory and Context

While praising the implementation of administrative process in the regulatory setting, Mashaw (1990) raises a concern that inadequate theoretical perspectives may result in scholars failing to recognise where current processes fall short. Taking heed of Mashaw’s (1990) concern, this literature review of administrative rulemaking will explore regulatory theories to determine a relevant theoretical context (Creswell 2003). This will be approached by summarising accepted regulatory theories, then identifying those applicable to rulemaking by administrative agencies and the role of participation.

Croley (2000) quotes a cliché of political science where the only two theories of regulatory government are corruption and incompetence. This view is paralleled in building regulation with structural engineer Hardy Cross’ argument that standards serve to control the ‘fools and rascals’ (1952). In practice the theoretical landscape is more complex, with academic study of regulation extending beyond the legal fraternity into disciplines of sociology, economics, political science, anthropology, social administration, psychology and geography (Baldwin, Scott & Hood 1998). This review will start by identifying the disciplinary boundaries of relevance to research on participants in rulemaking.

Joskow and Noll (1981) observe that ‘general theories of regulation tend to be either legislative or bureaucratic’ (1981, p. 36). This thesis focuses on the bureaucratic process of rulemaking when it is delegated to executive government, outside the legislature and judiciary. From the practical viewpoint regulatory theories on bureaucratic process can be categorised as various types of interest theory (Baldwin, Cave & Lodge 2012), relating to the sources of influence over the regulatory outcomes. These are categorised as either private, group or public interests (Baldwin, Cave & Lodge 2012).

2.6.1 Private Interest Theories

Grounded in an economic perspective on the role of interests, private interest theories concern regulatory outcomes driven by private or business interests (Baldwin, Cave & Lodge 2012).
Recognised approaches within this theoretical model include economic, public choice, special interest and regulatory capture (Baldwin, Cave & Lodge 2012). They derive from a common concern that regulatory process risks capture by private interests when administrative agencies become aligned with the interests that they are meant to regulate (Carrigan & Coglianese 2011; Stigler 1971). Croley summarises this aspect as outcomes where ‘agencies deliver regulatory benefits to well organised political interest groups, which profit at the expense of the general, unorganised public’ (1998, p. 5).

Stigler’s (1971) theory of economic regulation is quoted as a seminal example of regulatory capture (Croley 1998; Furlong 1997; Yackee & Yackee 2006). Viewing regulatory outcomes as an economic good, Stigler (1971) outlines the potential benefits and burdens of regulation on industry as a scheme of supply and demand. The theorist argues that participants from within an industry are incentivised to exert influence over the regulator, and that it is due to their greater resources that they may capture regulatory outcomes.

The Iron Triangle theory (Adams 1981) is identified by Croley (2008) as aligned with public choice theoretical models, and used by scholars of administrative rulemaking to describe the relationships at work in policy making between groups (Rinfret & Furlong 2012). Adopted by Golden (1998) as a theoretical context for her landmark study on rulemaking, it describes the political relationship between the legislature, government bureaucracy, and private interests, proposing that parties in this iron triangle are captive to the other parties, with outcomes not necessarily aligned to the public interest (Rinfret & Furlong 2012).

### 2.6.2 Interest Group Theories

Falling under the broader category of neoplaguralism, interest group theory modifies the context of private interest theories with the proposition that competition between interest groups provides regulatory outcomes that better reflect general interests (Croley 1998).

Historically, the pluralistic view of fair interest group participation was replaced by the public choice theorists’ standpoint of regulatory capture by powerful interests (Croley 1998; Kamieniecki 2006a). The neoplaguralists and interest group theorists saw a need to supersede public choice in order to recognise a balance between interests. From a pluralist perspective, interest groups will attempt to influence government (Croley 1998), and administrative rulemaking implements processes as a device to provide access for those relevant interests (Mashaw 1990). To be effective, ‘the logic of the pluralist model requires the agency to give adequate regard to each of the competing interests’ (Stewart 1975, p. 1757). This logic is aligned with Golden’s (1998) conclusion that rulemaking agencies act as arbiters or umpires between competing interests. Neoplaguralism extends this
pluralist view of interest group competition, theorising that increasing the levels of participation through groups representing public interest serves to offset the effects of business bias (Kamieniecki 2006a).

The effects of interest groups on rulemaking has been explored from the perspectives of the interest groups themselves, the administrative agencies, and analysed according to the potential bias they introduce (Furlong 1997; West 2004; Yackee & Yackee 2006). A quantitative study of interest group competition, confirmed a hypothesis that ‘the squeaky wheel gets the grease’ (McKay & Yackee 2007, pp. 340-1), finding that the volume of comments influences the rule outcome; that the agencies are responsive to technocrats; and that agencies change views in response to comments.

Some support for the neopluralist balance over the public choice bias has come from research which has applied private and interest group theories to rulemaking (Golden 1998; Kamieniecki 2006b; Nixon et al. 2002). However, this is not without contest from others (Yackee & Yackee 2006) and the question remains unresolved in current literature.

2.6.3 Public Interest Theories

Pre-dating private and interest group theories (Baldwin, Cave & Lodge 2012; Breyer 1982) public interest theorists argue that ‘regulators sought, to the best of their ability, to secure the public interest as defined in their enabling statutes’ (Breyer 1982, p. 10). A range of problems are identified in this theory, with a fundamental difficulty identifying what is actually in the public interest (Baldwin, Cave & Lodge 2012), as well as the problematic role of regulators, the possibility of the regulator’s incompetence, and the potential of bias to divert outcomes from the public’s interest (Stigler 1971). Mashaw states these concerns more bluntly, suggesting the public interest perspective is ‘nothing more than self-interested political bargaining in the pursuit of individual or group material interests’ (1990, pp. 279-80)

Recent works have reintroduced public interest to the theoretical debate (Croley 2000, 2008; Garrett 2000). Steven Croley (2008) establishes a case against the scepticism by public choice and neopluralist theorists (1998), proposing that regulatory government may deliver public interested outcomes (2000). Croley argues that ‘under certain conditions – conditions that are plausible given the real world legal-institutional environment in which federal administrative agencies operate – regulatory outcomes can and sometimes do advance broad social interests and increase social welfare’ (Croley 2008, p. 5). While not suggesting that regulation delivering public interested outcomes is a given, Croley asserts that it is possible given the right conditions.
Chronologically, theories of public interest, public choice and neopluralism fall along a time-line from the 1950s to the turn of the twenty-first century (Kamieniecki 2006a). While they all developed from, or in opposition to, pluralistic thinking (Croley 1998), they provide three theoretical contexts linked to the source of interests (Baldwin, Cave & Lodge 2012), which can be summarised as government arbitrating between interest groups, government captured by interests, or government and interest groups participating in a balanced decision making process. Irrespective of theoretical context, the administrative environment setting the processes and procedures under which these actors make decisions is expected to influence rulemaking outcomes (Croley 1998). Institutionalist scholars approach regulatory theory from the perspective of this administrative environment and the conditions under which it operates (Garrett 2000).

### 2.6.4 Institutional Theories

In contrast to interest theory perspectives, institutional theorists contend that organisational structures and their processes influence the role of actors and shape regulatory outcomes (Baldwin, Cave & Lodge 2012; Carrigan & Coglianese 2011). In relation to this thesis, the procedures and processes used by the Australian Building Codes Board to develop and revise the building code would constitute these institutionalist aspects of rulemaking.

McCubbins, Noll and Weingast (1987) are recognised for their notable (Baldwin, Cave & Lodge 2012) and ambitious (Mashaw 1990) work in institutionalism. Widely cited in rulemaking literature (Kerwin 2003; Rinfret & Cook 2014b; West 2004, 2009), their thesis is that when delegating the implementation of policy to bureaucrats, the legislature needs a method to ensure that those bureaucrats do not deviate from legislated policy aims (McCubbins, Noll & Weingast 1987). They propose that rulemaking under the processes defined in the U.S. Administrative Procedures Act (1946) is in place to provide the legislature with a method to monitor and control the actions of administrative agencies, resulting in a ‘decision making environment that channels agency policy choices in favour of constituencies important to political overseers’ (McCubbins, Noll & Weingast 1987, p. 274).

The ability for the legislature to monitor the administration is an important consideration when delegating their power. McCubbins, Noll and Weingast (1987) argue that allowing public consultation and participation in rulemaking is not necessarily to canvass decision making information, but is a way to alert the legislature to agency decisions that may have a significant backlash amongst their electorates. The authors coined the term ‘fire alarm monitoring’ to describe this effect (McCubbins, Noll & Weingast 1987) which allows the legislature to exert bureaucratic control when needed without the burden of directly monitoring administrative process. The
The hypothesis is not universally supported by other regulatory scholars. Heclo’s (1977) argument of wide participation and balance between political executives and bureaucrats is noted through other rulemaking literature as a counter to the argument of control (Golden 1998; Yackee & Yackee 2006).

Croley (1998, 2000, 2008) does not support McCubbins, Noll and Weingast’s (1987) views, describing them as a ‘sophisticated reincarnation’ of an old model posited by the public interest theorists where legislators passed statutes in the public interest and agencies smoothly implemented those statutes without compromising public interest (Croley 1998, p. 99). Croley (1998, 2000, 2008) builds a case to argue the exact opposite of McCubbins, Noll and Weingast’s (1987) ‘fire alarm’ model, arguing that while formal ‘notice and comment’ processes in rulemaking allow Congress to monitor administrative agencies, they also allow a broader range of interest groups to participate. He proposes that this increased participation may ‘actually foster agency autonomy and independence from the legislature’ (Croley 2000, p. 33).

To support his critique, Croley (2000) argues that McCubbins, Noll and Weingast (1987) do not consider that agencies can also block policy through inaction, thwarting ‘congressional will by failure to regulate’ (2000, p. 34). If the McCubbins, Noll and Weingast (1987) model were supported, and formal processes of the Administrative Procedures Act (1946) were focussed on achieving congressional will, the Act would have ‘mechanisms to overcome recalcitrant inaction as well as recalcitrant action’ (Croley 2000, pp. 34-5). Citing the absence of controls to prevent this inaction, Croley argues that ‘legislative control is not the major purpose or effect of administrative procedure’ (2000, p. 35).

Extending institutional theories, Croley’s work (1998, 2000, 2008) is described as ‘new institutionalism’ (Garrett 2000), as it encompasses a public interested focus, but in an institutional context. Croley identifies a failure in current theories ‘to incorporate any well developed vision of the administrative process’ (1998, p. 6), questioning ‘why leading theories of regulation (with the very partial exception of the civic republican theory) seek to explain and predict regulatory outcomes without closer attention to the specific processes by which those outcomes are generated...’ (Croley 2008, p. 68).

The following section of this review explores key claims of administrative process theory in relation to the U.S. Administrative Procedure Act (1946), then apply these claims in the context of the Australian Building Codes Board’s Intergovernmental Agreement (Commonwealth of Australia 2012).
2.6.5 Administrative Process Theory

Administrative process theory is presented by Croley (2008) as a counter to the public choice theorist’s argument that regulatory decision making by the legislature provides regulatory rent to narrow interests. Where public choice theorists ‘lament the growth of the regulatory state on the grounds that it provides expanded opportunities for regulatory rent seeking’, the administrative process theorist ‘sees administrative growth as a welcome shift of regulatory responsibility away from legislators and towards decision makers who are better situated to pursue general interests...’ (Croley 2008, p. 72).

The collective term ‘administrative process’ includes aspects of administrative law, the formal rules establishing the activities between regulators and other parties, along with administrative practice, and the implementation of those rules in rulemaking (Croley 1998). Whether considered in relation to the U.S. Administrative Procedure Act (1946), or the Australian Legislative Instruments Act (Cth) (2003) and Intergovernmental Agreement (Commonwealth of Australia 2012), this definition encompasses the formal legislative Acts which delegate rulemaking authority to the administrative agencies, and the processes and practices those agencies use in rulemaking.

<table>
<thead>
<tr>
<th>Core Theoretical Claims of Administrative Process Theory</th>
<th>Premise of the Claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator Motivation</td>
<td>Administrators are motivated to operate in public oriented interest.</td>
</tr>
<tr>
<td>Agency Autonomy</td>
<td>Administrative process rules allow agencies to decide regulatory outcomes not reflecting Congress’ preferences.</td>
</tr>
<tr>
<td></td>
<td>Rules promote agency autonomy from, rather than towards, legislative control.</td>
</tr>
<tr>
<td>Institutional Environment</td>
<td>Influences on agencies outside of the legislature, including executive oversight and judicial review, promote autonomy.</td>
</tr>
<tr>
<td></td>
<td>Where executive oversight and judicial review are applied, they enhance autonomy from the legislature and interest groups.</td>
</tr>
<tr>
<td>Administrative Neutrality</td>
<td>Agency processes reduce advantages of more powerful interests over the less powerful.</td>
</tr>
<tr>
<td></td>
<td>Political resources in electoral politics are made less valuable in administrative rule making.</td>
</tr>
<tr>
<td>Social Welfare</td>
<td>Processes allow agencies to identify socially desirable outcomes, rather than simply compromising between competing arguments.</td>
</tr>
<tr>
<td></td>
<td>Administrative processes generate information allowing selection of socially beneficial outcomes based on costs and benefits of regulatory alternatives.</td>
</tr>
</tbody>
</table>

Table 2-1: Summary of Core Theoretical Claims for Administrative Process Theory

Source: Adapted from Regulation and Public Interests (Croley 2008, pp. 73-4)
Administrative process and public choice theories are distinguished by the concept of ‘agency independence’ as opposed to ‘regulatory capture’, and by the argument that ‘interest groups that may often dominate legislative politics and thus legislative decision making do not enjoy the same degree of influence in the administrative arena’ (Croley 2008, p. 73). The concept of agency independence is considered an important distinction of administrative process theory, where agencies must not only demonstrate independence from their legislative power base, but also from the interests they seek to regulate (Croley 2008). Core theoretical claims distinguish between administrative process theory and other public choice theories of regulation (Table 2-1).

With a disclaimer of ‘actual results may vary’ (2008, p. 302), Croley admits that the claims of administrative process theory do not necessarily imply public interest outcomes in all cases. Although citing case study examples where congressional pressure and strong interest group opposition were not enough to influence or alter outcomes, he acknowledges the potential for these pressures to result in outcomes where public interest would not be enacted (Croley 2000, 2008). Recognising this potential, Croley (2008) identifies conditions which will constitute an environment conducive to public interested regulation (Table 2-2).

<table>
<thead>
<tr>
<th>Condition for Public Interested Outcomes</th>
<th>Application of Condition to Administrative Process Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator Initiatives</td>
<td>• Administrators take initiatives in line with the administrator motivation claim.</td>
</tr>
<tr>
<td>Interest Support</td>
<td>• Some interests actively support, rather than oppose, the administrative agency’s initiatives.</td>
</tr>
<tr>
<td>Absence of Legislative interference</td>
<td>• Congressional discipline, as argued by McCubbins, Noll and Wiengast (1987), in response to agency actions is absent or ineffective.</td>
</tr>
<tr>
<td>Participation Encouraged</td>
<td>• Agencies use administrative procedures to increase public visibility and actively solicit participation from broad interests.</td>
</tr>
<tr>
<td>Rational Justification</td>
<td>• Administrative processes develop records of scientific and economic justification supported by the relevant scientific field.</td>
</tr>
<tr>
<td>Political Support</td>
<td>• The agency initiatives enjoy White House support</td>
</tr>
<tr>
<td>Judicial Support</td>
<td>• Agency initiatives have a legal basis and receive judicial support</td>
</tr>
</tbody>
</table>

Table 2-2: Conditions for Public Interest Outcomes

Source: Adapted from Regulation and Public Interests (Croley 2008, pp. 301-2)

Croley acknowledges that it is not essential that all conditions are met for public interest outcomes to be achieved, but also argues that some ‘probably approach necessary or contingently necessary conditions’ (Croley 2008, p. 302). However, he does not specifically identify necessity, leaving a
knowledge gap in administrative process theory, reflected in calls for empirical study to measure the actual necessity for these conditions to be satisfied (Garrett 2000).

Croley (2008) argues that interest group power is offset by the broad participation of multiple groups, but is conditional on agencies using ‘administrative procedure to create public visibility and to solicit participation from a range of regulatory interests’ (Croley 2008, pp. 301-2). Others find that access to rulemaking and the right to participate does not necessarily translate to actual participation (Daley 2012; Rinfret & Furlong 2012; Stewart 1975; Yackee 2014). Applying administrative process theory to the research problem of understanding administrative process in the early stages of rulemaking can provide the theoretical context for a question of whether soliciting participation actually achieves participation, and whether the condition to encourage participation is a necessity.

2.6.5.1 Criticisms of Administrative Process Theory

Mashaw (1990) observes that ‘legal literature bristles with claims concerning the purposes of administrative process and processes, ranging from fairness to efficiency and utilising a host of other ideas as well – openness, accountability, legitimacy and rationality, to name but a few’ (1990, p. 267). The structure of these claims has received little attention and ‘administrative law remains ripe for a continuing realist revolution that focuses attention on administrative process as the product of political struggle’ (Mashaw 1990, p. 269). Administrative process theory (2008) may provide the focus Mashaw (1990) seeks. However, subsequent scholars and Croley himself have questioned the theory and its underlying assumptions.

The focus in administrative process theory on the delivery of regulatory outcomes in the public interest is criticised for not addressing the question of ‘what is a public interested outcome’ (Garrett 2000, p. 152), and failing to establish a baseline for the determination of desirable regulatory outcomes (Garrett 2000). Hinting at the complexity of this question, Garrett challenges Croley (2000) for deciding not to answer whether policies serving broad interests rather than narrow ones are socially beneficial, or wasteful (Garrett 2000). In noting the objection that administrative process theory does not necessarily deliver socially beneficial regulatory outcomes, Croley (2008) asserts that the theory does not require ‘optimal’ regulatory outcomes, arguing that criticism of a market for not delivering optimal social outcomes is unreasonable if that market ‘generally advances social welfare’ (Croley 2008, p. 299).

The condition that public interested outcomes from administrative process are contingent on the heads of agencies being motivated to achieve those outcomes is also questioned. Although noting the ideal of Croley’s (2000) administrator motivation claim, Garrett (2000) argues this ideal may not
be reached because agency heads come from the ranks of regulated industries and may continue to lobby on behalf of their industry after entering public service. This concern is identified in the Australian setting, with evidence that inspectors, regulators or officers in agencies are recruited from the industries they regulate (Makkai & Braithwaite 1998).

Differing motivations amongst administrative agency staff are also identified. Pluralists consider the administrative agency as an independent arbiter balancing the competing views of participating actors (Golden 1998). Neopluralists view agency staff as active participants in the rulemaking process with their own objectives (West 2004). Garrett’s (2000) concern regarding the motivation of the administrative agency directs this research towards the neopluralist perspective, allowing evaluation and analysis to ascertain the potential for bias in actions by the Australian Building Codes Board where agency staff themselves may be participants in this process.

Informational capture is cited as a further objection to administrative process theory (Croley 2008). In this, regulatory capture is not enacted by direct interest group coercion of administrative agencies, but by influencing agency staff through the supply of biased information. Croley (2008) argues that the transparent and consultative aspects of administrative process, where robust evaluation of information using appropriate domain experts, scientists and peer review offsets the possibility that rulemaking agencies may be misled by biased information. A similar question of informational capture is addressed by Yackee (2014) who does not share Croley’s (2008) optimistic view of administrative processes, finding that a bias towards information capacity can discourage individuals and groups from participating. Yackee (2014) finds that an informational focus may dissuade participants without expertise from offering information at all. This possibility is important for the consideration of participation in setting Australia’s building regulation and thus this research will more carefully evaluate groups who are absent from the current administrative process.

Croley’s (1998) opposition to McCubbins, Noll and Weingast (1987) relies on a pathway where agencies choose not to regulate, and thereby demonstrate agency autonomy by inaction. Garrett (2000) highlights this situation as an opportunity for further investigation. As a result, analysis in this research should not only evaluate changes made to regulation, but also evaluate proposed changes that did not proceed to regulation.

Although Croley’s (1998, 2000, 2008) research has established a place in scholarship on new institutionalism (Garrett 2000), some questions and criticisms remain. While recognising that the theoretical approach by new institutionalists has delivered an improved understanding of regulatory politics, Carrigan and Coglianese suggest that ‘some of its insights remain, for the moment at least,
largely tentative conjectures’ (2011, p. 113). The importance of further research to replace conjecture with evidence and support the theory (Croley 2000, 2008; Garrett 2000) returns this literature review to a focus on the empirical study of rulemaking and how this research may contribute. Gaps in public interested outcomes, the role of the administrative agency and the influence of information in rulemaking may all be informed through study of the processes used to set Australia’s building code.

2.6.6 Summary of Section 2.6
This section describes the search for a theoretical context to evaluate the administrative processes used to set Australia’s building regulation. Interest theories of regulation are relevant to rulemaking (Baldwin, Cave & Lodge 2012), but focus on regulatory actors. Institutionalism moved that focus from actors to the institutions and organisational structures that set administrative processes (Carrigan & Coglianese 2011) suggesting its applicability to this research.

Steven Croley, described as a new institutionalist (Garrett 2000), developed a theoretical approach proposing that administrative process can deliver public interested regulatory outcomes (Croley 1998, 2000, 2008). Croley’s (2008) administrative process theory is contingent on conditions to achieve public interested outcome, with the condition for administrative agencies to solicit participation identified as relevant to this research. Calls for empirical measurement (Garrett 2000) and further contextual case studies (Croley 2008) on these conditions establishes an agenda for further research. The analysis of processes and participants setting Australia’s building regulation may provide that measurement and contribute new insight to administrative process theory.

2.7 Knowledge Gap and Calls for Research
Having examined a range of scholarship relevant to administrative process and participation in rulemaking, this literature review will now summarise the knowledge gaps identified and the calls for further study. The predominant literature on regulation and rulemaking is U.S. based (Morgan & Yeung 2007). While legislative delegation of rulemaking power traces back to 1796, administrative rulemaking as a form of U.S. government gained pace after the 1930s depression, and was formalised with the Administrative Procedures Act in 1946 (Kerwin 2003). Notwithstanding this long history, Furlong (1997) and Golden (1998) are acknowledged as undertaking the earliest empirical studies, just before the start of the twenty-first century (Rinfret & Cook 2014b). Academic research into rulemaking therefore draws on a short, twenty-year body of work. Scholars acknowledge a significant research agenda lies ahead (Croley 2008; Kerwin 2003; Rinfret & Furlong 2012; West 2005). ‘How regulation gets made and implemented – and who influences regulatory decisions in
order to get what, when and how – has been a longstanding, persistent research challenge for political scientists, economists and legal scholars’ (Carrigan & Coglianese 2011, p. 108).

2.7.1 Study at Pre-proposal Stages of Rulemaking
Rulemaking literature is mostly based on the 1946 U.S. Administrative Procedure Act (Rinfret & Cook 2014b; West 2005) where the ‘vast majority of scholars examine the formal proposal stage and in particular the “notice and comment” phase to determine if public comments impact the language of the final rule’ (Rinfret & Cook 2013, p. 5). In practice, the efforts of an administrative agency do not start with publication of a proposed rule for comment (Yackee & Yackee 2012) and interest groups do not restrict their participation to ‘notice and comment’ (Furlong 1997).

Restricting study to the ‘notice and comment’ stage may provide a misleading view of the overall interaction between interest groups and rulemaking agencies (Nixon et al. 2002), with a question of ‘whether scholarly findings would differ when reviewed during the pre-proposal stage of a rule’ (Rinfret & Furlong 2012, p. 387). Despite interest groups identifying informal agency contact as an effective influence technique (Kerwin 2003) and agency contact during the pre-proposal stage being dominated by regulated parties (Wagner, Barnes & Peters 2011) ‘current literature does not, however, explore this process (Rinfret & Furlong 2012, p. 386). Although the ‘possibility that a great deal of interest group influence occurs outside the glass box of notice and comment’ (Wagner, Barnes & Peters 2011, p. 108), these decision stages are generally ignored in research (Wagner, Barnes & Peters 2011). In rulemaking, ‘we still lack an understanding of interest group influence during the pre-proposal stage of federal rules’ (Rinfret 2011, p. 233), and ‘more research is clearly needed’ at this stage (Rinfret 2011, p. 242).

While scholars call for additional study at pre-proposal stages, there is little mention in current literature on the initiation of the rulemaking process. This includes how a change to regulation is initiated and how the administrative agencies decide their agenda for regulatory development. Yackee and Yackee (2012) acknowledge the start of the rulemaking process with a ‘bright idea’, but do not discuss the initiation or source of that idea. Croley (2008) mentions methods of initiation, including lawsuits bringing issues to the attention of agencies or impetus from within an agency itself, but provides little administrative detail to indicate the process of initiation. The importance of this initiation stage is established by Croley’s (2000, 2008) argument against McCubbins, Noll and Weingast’s (1987) findings, suggesting the possibility that agencies may exert autonomy by not actioning regulation. Excluding initiation stages of rulemaking, when the regulatory agenda is set and an agency’s failure to act would be most evident, suggests a major gap in current research methods.
The focus of prior research on selected stages and tendency to study later stages in the rulemaking process establishes a knowledge gap for this study. Calls for research to address the entire administrative process ‘acknowledge that a full understanding of the rulemaking process must recognise how its formal and informal dimensions shape and delimit one another’ (West 2005, p. 665). The interrelatedness of the informal and formal processes leads to a view that ‘the relationship between the proposal-development and comment phases of rulemaking deserves much more attention that it has received’ (West 2009, p. 577).

2.7.2 Disagreement over Methodologies
The current literature indicates general agreement that the academic understanding of rulemaking may benefit from research covering the whole administrative process, from initiation through the pre-proposal and post-proposal stages. However this is not underpinned by methodologies which may deliver this understanding, with the informality and behind the scenes communication during the pre-proposal stage making it difficult for scholars to evaluate (Rinfret & Furlong 2012). Rinfret and Furlong summarise this research challenge, concluding that ‘numerous issues and controversies currently exist within the rulemaking literature’ (2012, p. 385). Disagreement exists over the methodological approaches, information sources, the selection of rules for study, the selection of decision stages to study, and which methods provide the best insights on interest group influence (Rinfret & Furlong 2012; West 2009). Current studies model administrative agencies as single entities, rather than exploring their internal, dynamic organisational processes (West 2005), and do little to identify who participates in the process (Golden 1998). Prior research shows a tendency to select high profile rules for study (Golden 1998), focusing on those with either large or small numbers of comments and failing to investigate those rules that fall between these extremes (Rinfret & Furlong 2012). These constraints in methodology have ‘prevented the assessment of rulemaking procedures from moving very far beyond impressionistic accounts and deductive arguments’ (West 2004, p. 68).

Early studies illustrate varied approaches to studying the same process of rulemaking within the U.S. Administrative Procedures Act (1946). For example Furlong (1997) sought to explore how interest groups relate to rulemaking by survey of interest group perceptions, West (2004) focused on the views of the administrative agency by interviewing its staff, and Golden (1998) looked at the influence of external participants through the ‘notice and comment’ stage by identifying differences between the proposed and final rules, then correlating these with comments submitted during the intervening period. These authors identified limitations in their own methods and the work of others. Furlong (1997) discusses difficulty finding effective measures of interest group influence, noting that his measurement of the interest group’s own perceptions of their influence may not

The methodological challenge in U.S. study is traced to the lack of formal process at the pre-proposal stages in U.S. rulemaking (Rinfret & Cook 2014b; Yackee & Yackee 2012). In contrast, the Australian Building Codes Board implements a formalised, common initiation process regardless of whether the proponent is a government body, industry or private citizen (Australian Building Codes Board 2012a). This research of rulemaking in Australia leverages the information created by these structured administrative processes, addressing Rinfret’s (2011) concern that research has overlooked this stage. It also allowed development of a research design which facilitates the ‘cradle to grave’ study called for by Furlong (1997).

2.7.3 Rulemaking and Domain Context
The value of a generalised study of rulemaking, without context to a relevant domain, is questioned (Croley 2008; Kerwin 2003; West 2005). Rulemaking for different purposes in differing technical or political domains has implications for analysis, and a lack of context is identified as a limitation in existing studies (Kamieniecki 2006b; West 2005). Findings are limited because the studies are ‘divorced from concrete observations’ (West 2005, p. 662). By restricting study to the ‘notice and comment’ stage, the lack of contextual knowledge of the rulemaking agency limits the researcher’s ability to evaluate the significance of a rule change (West 2004). The lack of concrete observation in current research is evidenced in Kerwin’s finding that ‘analysis of official rulemaking records and surveys of interest groups’ are rare (2003, p. 178). A solution to these limitations is a methodology where the researcher becomes ‘immersed in a particular rule or small sample of rules’ (West 2005, p. 662). This immersive approach was applied in this research project focusing on rulemaking by a single agency and changes to a defined set of rules under Australia’s building code.

2.7.4 Administrative Process and Institutionalism
Improved understanding of rulemaking through further study of the administrative process is placed on the research agenda by a number of authors (Croley 2008; Rinfret & Furlong 2012; West 2005; Yackee & Yackee 2010). Mashaw predicts that ‘administrative law remains ripe for a continuing “realist” revolution that focuses attention on administrative process as the product of political struggle, rather than the product of normative, idealist elaboration’ (1990, p. 269). West adopts a similar view, suggesting ‘the analysis of rule development as an organisational process may both contribute to and help to integrate academic literatures that have had relatively little to say to one another’ (West 2005, p. 664). At the applied level, ‘agencies would benefit from research regarding what factors should guide the choice of participatory process’ (Daley 2012, p. 501).
Administrative process theory (Croley 1998, 2008) outlines conditions that may deliver regulation in the public interest, but does not establish empirical links between those conditions and regulatory outcomes. The theory is not sufficiently developed to appropriately explain whether those administrative outcomes are aligned with public interest (Garrett 2000), and Croley (2008) himself acknowledges that some of the identified conditions are contingent and need not be met in all cases to achieve public interested outcomes.

The condition that rulemaking agencies encourage participation by using ‘administrative procedure to create public visibility and to solicit participation from a range of regulatory interests’ (Croley 2008, pp. 301-2) is aligned with the focus of this study on participation in rulemaking. However, it is also acknowledged that simply providing opportunities for participation does not indicate that participation will occur (Daley 2012; Stewart 1975; Yackee 2014). This leaves a knowledge gap as to the necessity and effect of this condition. However, evaluating the condition to encourage participation in isolation from other issues may be misleading, with prior research finding that ‘well-meaning administrative process requirements may actually be impeding, rather than encouraging, engagement from the full spectrum of affected participants’ (Wagner 2013, p. 673). To address this gap, this research evaluated participation in setting Australia’s building code through the context of administrative process, with an awareness that those processes may encourage or dissuade participation.

2.7.5 Summary of Section 2.7
Croley calls for ‘students of regulation to devote increased attention to the messy details of administrative process’ (1998, pp. 166-7).

The literature identifies general agreement on a call for more research into the early stages of rulemaking, the effects of administrative process on participation, and the conditions under which that participation occurs. Specifically, the current literature identifies a focus on the ‘notice and comment’ stage of rulemaking, with an absence of study at the earlier, and less formalised, proposal stage where the agenda is set and the content and wording of proposed rules are developed.

The contribution of new institutionalists and administrative process theory has been acknowledged, but an absence of empirical support and measurement was identified. Study of the role played by formal administrative processes and their effect on participation in rulemaking, understanding who participates, and the influence of that participation all contribute to these theoretical approaches.

The data sources available through the formalised, end-to-end rulemaking processes of the Australian Building Codes Board provided a documented record of participation from the initiation
of change, drafting of the proposed rule, public comment in response to the rule, and through to final publication. This addressed calls for research at pre-proposal and rule initiation stages of rulemaking. Applying this new dataset in this research responds to Crolely’s call to address administrative process’ messy details, delivering research outcomes that may result in moving institutionalist insight from its ‘largely tentative conjectures’ (Carrigan & Coglianese 2011, p. 113).

2.8 Summary of Chapter Two

This chapter has synthesised theories of regulation and studies of rulemaking in the context of participation in the administrative processes of the Australian Building Codes Board. The literature review has identified the role participation plays in bringing democratic legitimacy to rulemaking performed by (non-elected) administrative agencies.

Participation in rulemaking is linked to the type of information made available to decision makers, with differing types of participants bringing different types of information. Delineation between the views of experts and the views of society introduces the challenge for rule makers to balance each type of information. While participation in rulemaking is an aspiration of governments and the need to balance views widely reported in literature, empirical studies suggest this may not translate into practice. As the aim of this research is to look beyond mechanistic aspects of participation the author explored literature which differentiated the range of actors able to participate from those who actually do engage with the process.

Interest theories of regulation provide an explanation of the influence different types of actors (whether public, private or interest groups) have on regulatory outcomes. Institutional theory introduces the influence of administrative process on those actors and Crolely’s (2008) administrative process theory is suggested as a suitable theoretical model for this research. It aligns with the research aim to evaluate influences on participation across all stages of rulemaking by an Australian government agency.

This literature review has identified disagreement over the methodological approaches to study rulemaking and knowledge gaps in domain context and the role of administrative process. The literature in each of these areas was examined in relation to the objectives of the Australian Building Codes Board and the data generated by the administrative processes used to change Australia’s building code. It is suggested that this data may bring new insights to the theoretical link between participation and the influence of administrative process encompassed in the aim of this thesis, and translate to knowledge which may inform changes to current practice.
Chapter 3. Methodology and Research Design

3.1 Chapter Outline

The study of regulation has generated interest in ‘law, economics, political science, sociology, history, psychology, geography, management and social administration’ (Baldwin, Cave & Lodge 2012, p. 1), with the discipline of regulation emerging as a ‘distinct field of scholarly enquiry’ (Morgan & Yeung 2007, p. 343). Methodological development in this field is not straightforward and a review of the literature has identified differing approaches in prior theoretical and empirical studies of rulemaking (Rinfret & Furlong 2012; West 2009).

This chapter considers previous methodological approaches in relation to the aim of this research to evaluate the influence of administrative processes on actor participation across all stages of rulemaking. Key dimensions in this aim, the inclusion of participants, the influence of processes and intention to include all stages of rulemaking, guide the design of the research. The selected methodology builds on prior research in the field of regulation, and identifies a theoretical approach which may provide new insight into the tension between regulatory experts and societal views.

3.1.1 Structure of this Chapter

While methodological development for this thesis draws on a number of authors, the overall structure of this chapter follows Crotty’s (2003) linked elements of epistemology, theoretical perspective, methodology and methods (Figure 3-1).

![Figure 3-1: Elements of the Research Process and Structure used in this Thesis](Source: Adapted from Crotty (2003))
Epistemology and theoretical perspectives are explored before considering and identifying a methodological approach. The selected research methods are presented, describing the specific data collection and analysis techniques which were applied.

A summary of the overall research design discusses its suitability to meet the aims and objectives set for this study. The chapter concludes by discussing limitations of the research design which may have implications on the applicability of findings.

3.2 Epistemology

Constructionist evaluation is proposed as a suitable epistemology for this work. The theoretical orientation of constructionism is relevant to social construction - how have people constructed reality, what are their perceptions of worldview, and what are the consequences of their constructions on behaviour (Patton 2002). The processes of participative rulemaking are socially interactive and the opportunities for participation in the committees which develop and revise Australia’s building code appear to be representative in nature. Committee membership represents a collection of industry and government participants (Commonwealth of Australia 2012), with their decisions to change regulation the outcome of a social interaction.

In applying this epistemological perspective to a study of participation in setting regulation, the notion of truth ‘becomes a matter of consensus amongst informed and sophisticated constructors’ (Patton 2002, p. 96). Different participants may perceive government programs differently, but when using a constructionist framework, all perceptions are deemed ‘real’ and worthy of attention (Patton 2002). In the rulemaking and regulatory domain differing perceptions may be reflected in questions of ‘who fears what and why’ (Baldwin, Scott & Hood 1998, p. 38). The observation that ‘key issues in rulemaking are often not factual at all’ is also important (West 2005, p. 660). Constructionist evaluation acknowledged differing views and fears and their contribution to a perceived reality (Patton 2002).

A constructionist approach to research has previously been employed to capture input from minority groups and ensure inclusion of views outside the mainstream (Boblin et al. 2013; Patton 2002). The approach may be equally applicable to actors in building regulation, allowing this research to differentiate building practitioners and engineering experts from non-expert building users, such as the home owner. Designing this qualitative inquiry under a constructionist epistemology will therefore allow continued awareness of the interaction between differing views from different participants (Creswell 2003) and the implications of each view to the decision making process (Patton 2002).
The Australian Building Codes Board is set objectives to actively enact regulatory reform (Commonwealth of Australia 2012) which align with the key concepts of constant revision and change found in constructionist approaches (Bryman & Bell 2011). At a policy level, regulation reviews are regularly undertaken by the Australian government (Productivity Commission 2004, 2006b, 2012) and their findings are implemented in practice. Changing societal expectations result in constant changes to regulation (Banks 2006) and the Building Code of Australia is under continual revision with new editions published annually\(^3\) (Australian Building Codes Board 2013). This impetus for change is reflected in the first recital in the Intergovernmental Agreement (Commonwealth of Australia 2012), to develop a more efficient and internationally competitive building industry, through reform of building and plumbing regulation nationally.

The participative focus of this research, the socially interactive nature of building code development and the constantly changing societal expectations of the protection regulation affords, are suited to research under a constructionist epistemology.

3.2.1 Approach to Constructionism

Differences in constructionist terminology are identified in qualitative research texts (Creswell 2003; Crotty 2003; Patton 2002), with constructionist, constructionism and constructivism all referenced. Patton defines this epistemological approach as ‘Social Construction and Constructivism’ (Patton 2002, p. 96). Crotty (2003) distinguishes the two terms, reserving constructivism for the activity of an individual mind while applying constructionism to the activity of the collective. Crotty’s approach better reflects the epistemology selected for this study, evaluating the administrative processes of a collective. Constructionism is therefore selected as the terminology for this research.

Constructionism is distinguished by dualist and monist approaches, differentiating between actual knowledge, and perceptions of that knowledge (Patton 2002). Dualists judge the adequacy of the participant’s interpretation of their perceptions, while the monist does not attempt to relate those perceptions to an objective domain (Patton 2002).

Prior rulemaking research acknowledges the difficulty of understanding what is in the public’s interest (Garrett 2000) and the challenge of judging the adequacy or value of regulatory outcomes in the objective domain (Baldwin, Cave & Lodge 2012; Croley 2000). This thesis does not look to address the challenges of objective judgement identified in prior studies. It builds on Croley’s (2008) administrative process theory, exploring the influence of administrative processes on participants, rather than judging the adequacy of the rulemaking outcomes. This focus on administrative process

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\(^3\) In 2016 this changed to a three year publication cycle, with the next scheduled revision due for publication. This change occurs outside the scope of this research.
indicates a monist approach to constructionism is applicable. The impact of this approach will exclude findings which judge the adequacy or societal alignment of rulemaking outcomes.

### 3.3 Theoretical Perspective

An interpretivist theoretical perspective was adopted for this research. Selection of this perspective was guided by the differing viewpoints evident in the regulatory environment and current administrative processes. The safety requirements in building regulation are driven by science and engineering (Atkinson 1973). These relate to the natural sciences which suggests a positivist perspective (Bryman & Bell 2011). However, the amenity and sustainability requirements included in Australia’s building code (Australian Building Codes Board 2012d) reframe decision making from empirical measures of safety, to judgements of acceptability. Decision making committees are required to make subjective decisions based on their private beliefs and their interpretation of societal expectations (Tetlock 2005). To be an effective decision tool, regulatory processes must achieve an equilibrium between these scientific expertise and societal viewpoints (Pidgeon 1998).

Building regulation is developed and decided by small groups of participants formed into technical and administrative committees (Australian Building Codes Board 2012a), with their membership and deliberations outside of the democratic processes of elected government (Coombs 2002; Freedman 1998). Potentially conflicting views within the members of these committees suggests a socio-political approach to decision making (Pidgeon 1998; Rayner & Cantor 1987) influenced by societal behaviours (Bryman & Bell 2011).

The selection of a theoretical perspective for this research therefore acknowledged that the processes which enable participation in rulemaking may provide democratic legitimacy (Bingham, Nabatchi & O’Leary 2005; Rinfret & Furlong 2012; Wagner 2013; West 2004; Yackee 2014) and that potentially conflicting views may be balanced by appropriate administrative procedures (Croley 2000, 2008). The focus on participation in rulemaking guided this research to a constructionist epistemology based on the activity of a collective, with this focus also steering the selection of a theoretical perspective away from natural sciences towards social sciences, or from positivism to interpretivism.

#### 3.3.1 An Interpretivist Perspective

The outcomes of regulatory decisions can be fed back, through social behaviours, to eventually change the reality (Bryman & Bell 2011). In building regulation, outputs in the form of a revised building code alter the requirements for what is built, and therefore the nature of the built environment that society experiences. If those members of society then participate in setting regulation, their views, informed by their experience of current buildings will influence what is built
in the future. Future society would in turn be influenced by those buildings, bringing that experience to their participation in the setting of their future building codes. In social research an interpretivist perspective is suggested when outputs can affect behaviours and alter the observable world (Bryman & Bell 2011).

Evidence of changing societal expectations is found in the Australian Productivity Commission’s observation that ‘just as regulation naturally develops in response to society’s needs, its excesses are largely driven by societal and political pressures...key among these, in our view, has been a growing and unsustainable aversion to risk, demanding a rethink about the role of regulation in modern society’ (Productivity Commission 2006b, Foreword). Examples in the built environment are seen in the unacceptability to society of asbestos, outside toilets, or uninsulated homes, all which were the norm in 1950’s Australia. Recognition that changes in societal expectations are reflected in movement in the quantity and stringency of building regulation (Productivity Commission 2004) suggests the processes which develop those regulatory outcomes are ‘being accomplished by social actors’ (Bryman & Bell 2011, p. 22). This social nature of decision making and evidence of changing expectations indicates an interpretivist theoretical perspective may be appropriate for this study.

Adopting an interpretivist perspective in contrast to the positivism suggested by scientific analysis (Patton 2002) requires justification. This includes notions of subjective judgement, emotional influence, and policy review.

Subjective judgement is necessary to translate quantifiable engineering-based views into regulatory outcomes. To set structural requirements for wind loading on a building, the regulator must first determine wind forces used to calculate those requirements, deciding whether society expects buildings to withstand a ‘1-in-200’ year cyclone, or a ‘1-in-2000’ year cyclone (Australian Building Codes Board 2012c). The decision therefore moves from ‘how safe is safe enough’, towards societal consent establishing ‘how fair is safe enough’ (Rayner & Cantor 1987, p. 3). The theoretical perspective transfers from a positivistic engineering calculation, to an interpretivistic judgment of a society’s accepted level of safety.

Theories of bounded rationality demonstrate how decision making can be influenced by emotions, resulting in decisions which may be out of line with economic maximisation (Selten 1999). Emotional influence can impact cost-benefit assessments, where it is theorised to affect assessment weighting (Fessler 1999) as evidenced in Australia’s selection of a higher cost option when setting requirements for domestic smoke alarm installations (Australian Building Codes Board 2012f). West (2005) identifies emotional drivers in rulemaking, where factual information is differentiated from
that which is considered equitable. Similar findings by the Australian Productivity Commission informed their recommendation to exclude community expectations from the mission of the Australian Building Codes Board on the basis that those expectations may reflect a level of regulation that the community is unwilling to pay for (Productivity Commission 2004). An interpretivist approach may allow understanding of the role non-factual information plays in rulemaking, and its effect on decision making.

An interpretivist approach allows this research design to evaluate both technical and policy review stages apparent in the processes setting Australia’s building regulation (Commonwealth of Australia 2012). Recommendations from the Building Codes Committee, made on the basis of science and engineering, are subject to review by the Australian Building Codes Board (Australian Building Codes Board 2012a). This review evaluates regulatory outcomes against policy driven objectives, and is the final decision point before publication and promulgation. The final content of the building code is therefore decided by a predominantly non-technical forum, regardless of whether that content regulates safety or amenity (Australian Building Codes Board 2012a).

An interpretivist theoretical perspective is therefore selected for its suitability to the participatory focus of the research, the involvement of social actors, and acknowledgement that building regulations evolve with changing societal views.

3.3.2 Summary of Philosophical Approaches
Selection of the philosophical approaches for this research has been guided by Patton (2002), using Crotty’s (2003) model of the research process. An interpretivist theoretical perspective was adopted, reflecting the societal nature of rulemaking in deciding what society considers safe enough (Rayner & Cantor 1987). This perspective aligns with the epistemological position of constructionism reflecting the social construction and constant revision (Bryman & Bell 2011) of setting regulation using participatory processes.

3.4 Methodology
This research inquiry studied participation in the administrative processes used to develop and revise Australia’s building code. Its objectives included the application of findings to propose changes to current practice. Evaluation research, as a methodology suited to researching government programs which ‘intervene in society and solve problems’ (Patton 2002, p. 218) was adopted for this thesis.

Evaluation research may be used to explore the ‘effectiveness of specific solutions and human intervention’ (Patton 2002, p. 218), which suggests its applicability to the study of participation.
Evaluation methodologies are divided into summative and formative approaches (Patton 2002). A summative approach sums up and judges the overall effectiveness of programs and does not align with the administrative process focus of this thesis. Formative evaluation is aimed towards program improvement and is suited to identifying changes which may be applied to shape the program being studied (Patton 2002). Its focus on human intervention and the applicability of findings towards program improvement indicates the suitability of a formative evaluation methodology for this research.

3.4.1 Inductive Approach and Categorical Aggregation

Formative evaluation was applied by coding the administrative records and documents generated during development of Australia’s building code. Inductive insights were primarily obtained by the categorisation of information (Stake 1995), where coding the data contained in administrative records may provide a ‘rigorous review of what the data is saying’ (Coffey & Atkinson 1996, p. 27).

To apply this evaluative approach, data codes and categories were inductively developed throughout the research process. Inductive analysis uses open codes, grouped into categories which then inform subsequent analytical frameworks (Elo & Kyngas 2007). This approach may provide ‘immersion in the details and specifics of the data’ (Patton 2002, p. 41) which is suited to exploring the influence and relationships between participants in building code development.

The absence of a rigid data structure in inductive methods is suited to a case study under a constructivist epistemology (Boblin et al. 2013). However, it is possible that early stages of coding and categorisation can become chaotic due to ‘seemingly unconnected pieces of information’ (Elo & Kyngas 2007, p. 113). To overcome this, the research design followed Patton’s (2002) approach and blurred the differentiation between inductive and deductive techniques. It first examined the data by applying a predefined ‘theoretical framework developed by someone else’, then revisited the data using inductive analysis to identify ‘previously undiscovered’ patterns (2002, p. 454). Applying this predefined framework as an initial deductive coding step reduced the data into categories (Coffey & Atkinson 1996), treating it in a quasi-quantitative way (Stake 1995). This preparation, or first cycle coding, allowed initial examination of the data to ‘provide analytic leads for further exploration’ (Saldana 2013, pp. 100-1).

The methodology therefore involved analysis by inductive open coding, but brought structure to the initial data review by applying a ‘preparation phase’ (Elo & Kyngas 2007) with predefined categories derived from the literature review. It is important to highlight that applying this deductive preparation step is different from purely deductive analysis, in which aspects of data not fitting the defined coding matrix would be excluded from analysis (Elo & Kyngas 2007). In this inductive
implementation, non-fitting data (such as instances when the administrative agency delegated decision making to other parties) were not be excluded, but the coding and categorisation later extended to capture the newly exposed information. The specific method and development of the predefined framework are detailed in Section 3.5.2.

3.4.2 Data Sources

The key data source for this research was information generated through the administrative processes of the Australian Building Codes Board during the development and revision of Australia’s building code. These administrative processes are initiated by submission of a formal ‘Proposal for Change’. Proposals may be submitted by anyone and represent the first participation point in building code development. Submissions are made using a set template of questions on the nature of the change, the problem addressed, the proposed solution, and its impacts (Australian Building Codes Board 2012e). Each proposal then follows a review and decision making process outlined in Figure 3-2. Administrative documents record the agency’s recommendations, building codes committee discussions, public comments, and final published building code as the initiating change proposal progresses through this process.

![Figure 3-2: Australian Building Codes Board, Proposal for Change Procedure](image)

A flow diagram of the main events in the administrative process from initiation of a proposed change through to publication of the building code.

Source: Adapted by the author from Australian Building Codes Board documents (2012a, 2012c, 2015c)

The documented records created by the administrative process in Figure 3-2 are summarised in Table 3-1 and their relationship to the annual publication cycle of the building code detailed in Figure 3-3.
<table>
<thead>
<tr>
<th>Record Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal for change</td>
<td>Document following a pre-defined template (see Appendix 2) submitted to the Australian Building Codes Board to instigate changes to the published building code.</td>
</tr>
<tr>
<td>Building Codes Committee agenda</td>
<td>Agenda prepared by the ABCB Office for the three Building Codes Committee meetings held each year. This includes all proposals for change submitted since the previous meeting along with the ABCB Office’s recommended response to the proposal.</td>
</tr>
<tr>
<td>Building Codes Committee minutes</td>
<td>Formal minutes recording the meeting outcomes and recommended response to each change proposal.</td>
</tr>
<tr>
<td>Public comment draft of the building code</td>
<td>A draft of the building code with all proposed changes in mark up. This is made publically available through the ABCB website.</td>
</tr>
<tr>
<td>Public Comments</td>
<td>Comments received in response to the draft changes in the building codes. These are included in the agenda papers for the October Building Codes Committee meeting.</td>
</tr>
<tr>
<td>Board draft of the building code</td>
<td>Marked up draft building code reflecting the proposed changes from prior years publication (Note – this document is not available to this research).</td>
</tr>
<tr>
<td>Board meeting minutes</td>
<td>Outcomes of the Board meeting and final decisions on the Board draft of the building code (Note – this document is not available to this research).</td>
</tr>
<tr>
<td>Published building code</td>
<td>The final published building code.</td>
</tr>
</tbody>
</table>

Table 3-1: Summary of documents to be used in this study

Source: Adapted by the author from Australian Building Codes Board Documentation (Australian Building Codes Board 2012a, 2012f, 2015b; Commonwealth of Australia 2012).
Identification of the relationship between records generated at each stage in the annual publication cycle.

Source: Adapted by the author from Australian Building Codes Board Documentation (Australian Building Codes Board 2012a, 2012f, 2015b; Commonwealth of Australia 2012).

Patton (2002) explains that data sources can be organised in a number of ways which he defines according to their issues, questions or processes. This research organised the data by process, analysing each document according to its sequence in the annual publication cycle of the Australian Building Codes Board.

For the 2009 to 2013 period studied, all proposals for change, ABCB Office recommendations, Building Codes Committee minutes, draft building code, public comments and final published building code documents are available for this research. Collectively, these documents provided detailed information about program implementation under a stable administrative process as well as an information rich dataset suited to formative evaluation techniques (Patton 2002).
3.4.2.1 Consolidation of Separate Documents

To apply a methodology of formative evaluation (Patton 2002) using categorical aggregation requires these discrete process documents to be combined into a single information source. The methodological approach to unify Australian Building Codes Board documents into a data set encompassing the end-to-end administrative process distinguishes this study from prior rulemaking research, as it combines information from public participation with internal processes previously shaded from study (West 2009). Data consolidation was achieved by linking information from the documents generated throughout the administrative process to their initiating change proposal. The result was a single database which contains details of all 192 change proposals submitted to the Australian Building Codes Board over the four-year study period, along with the associated decision making activities and outcomes for each.

While some documents directly linked to their initiating change proposal, others required more forensic analysis to establish connections. For instance, changes made to clauses in the public comment draft or the published building code are not referenced to the initiating change proposal. Two information sources additional to those listed in Figure 3-3 aided this forensic tracking and allowed this analytical methodology to associate proposals with their published outcomes. First, the Australian Building Codes Board’s administrative office provided copies of searchable electronic versions of all Building Code volumes for the duration of this study. Second, an internal document available to Building Codes Committee members identifies the ‘source of change’ for each revision made to the published Building Code. These additional process documents established direct links between each proposal and its published outcome, allowing this research to encompass the entire administrative process.

Collectively, these separate documents provided a record for each change proposal from initiation through to the eventual publication of the building code.

3.4.3 Building Code Development in other Jurisdictions

The information generated through the development of Australia’s building code provides detailed descriptive information across all stages of the rulemaking process. Methodological development looks to place this Australian information in the context of other research on rulemaking. An initial approach to this research involved reviewing building code development in other international jurisdictions, but because systems of building regulation differ across countries (Gann, Wang & Hawkins 1998) with varying implementations, this made it difficult to perform comparative research (van der Heijden 2009).
Inter-jurisdictional differences were identified in the development of building regulations (Pedro, Meijer & Visscher 2010), their promulgation (Atkinson 1973; Inter Jurisdictional Regulatory Collaboration Committee 2010; National Academy of Sciences 2003) and related enforcement regimes (van der Heijden & de Jong 2009). Variations were also seen within common jurisdictions; not only differences across the European Union, but also distinct regulatory systems existing in England, Wales, Northern Ireland and Scotland within Great Britain (Pedro, Meijer & Visscher 2010).

The development and promulgation of Australian building regulation was found to differ from others internationally. Analysis across 14 countries (Inter Jurisdictional Regulatory Collaboration Committee 2010) found the majority of countries develop building regulation through their national government. Only Austria, Canada and Australia delegate its development to a separate organisation working for government, (Table 3-2).

<table>
<thead>
<tr>
<th>Responsibility for of Building Code/Regulation Development</th>
<th>Jurisdictions Following this Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development by the National Government</td>
<td>China, England, Japan, New Zealand, Norway, the Netherlands, Scotland, Singapore, Spain, Sweden</td>
</tr>
<tr>
<td>Development by Regional Government</td>
<td>Austria, USA</td>
</tr>
<tr>
<td>Development by Local Government</td>
<td>USA</td>
</tr>
<tr>
<td>Development by an Organisation or Administrative Agency working for Government</td>
<td>Austria, Australia, Canada</td>
</tr>
<tr>
<td>Development by the Private Sector</td>
<td>USA</td>
</tr>
</tbody>
</table>

Table 3-2: Development of Building Regulations across Jurisdictions
Source: Tabulated from Interjurisdictional Regulatory Collaboration Committee (Inter Jurisdictional Regulatory Collaboration Committee 2010)

The methods for participation in the development of building regulation also differ across jurisdictions. Comparison of European regulation found most countries allow participation in the process, but implementation of participation varies from expert forums and advisory boards, to promotion of public debate on proposed changes (Pedro, Meijer & Visscher 2010).

The promulgation of regulation differs across jurisdictions. The content of building regulation is linked to its method of promulgation and enforcement (Pedro, Meijer & Visscher 2010) with both aspects operating as a heuristic system (van der Heijden 2009). Meacham (2010) found that in most
countries, the promulgation and enforcement of building regulation occurs at a national level, with only Australia and Austria applying regional enforcement, (Table 3-3).

<table>
<thead>
<tr>
<th>Responsibility for Promulgation of Building Regulation</th>
<th>Jurisdictions Following this Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promulgated by the National Government</td>
<td>China, England, Japan, New Zealand, Norway, the Netherlands, Scotland, Singapore, Spain, Sweden</td>
</tr>
<tr>
<td>Promulgated by Regional Government</td>
<td>Austria, Australia</td>
</tr>
<tr>
<td>Promulgated by Regional and Local Government</td>
<td>Canada, USA</td>
</tr>
</tbody>
</table>

Table 3-3: Promulgation of Building Regulations across Jurisdictions

Source: Tabulated from Interjurisdictional Regulatory Collaboration Committee (Inter Jurisdictional Regulatory Collaboration Committee 2010)

If the processes to develop (Table 3-2) and promulgate building regulation (Table 3-3) are overlayed, Austria appears to be the only studied jurisdiction with similarities to Australian processes. However Austria was transitioning between regulatory systems during the period of his study (Inter Jurisdictional Regulatory Collaboration Committee 2010) and therefore did not provide a stable administrative process for comparison.

The variability identified across jurisdictions and the unique processes used for the development and promulgation of building regulation in Australia limit the validity of comparisons. Therefore this research did not seek to compare Australian practice with other international building code development. Instead, the development of methodology for this thesis looked to the broader topic of rulemaking by executive government discussed in Chapter One. For comparison, participatory processes in areas of rulemaking outside building regulation inform this research.

### 3.4.4 Relevance of the United States Administrative Procedure Act

The literature review in Chapter Two identified similarities between the administrative processes used to set Australia’s building code and those used for rulemaking by U.S. administrative agencies. This section on methodological development extends that review to identify specific similarities and differences between the systems of rulemaking in the two jurisdictions.

It is highlighted that this thesis does not seek to directly compare the implementation or operation of the two systems of rulemaking nor judge the effectiveness of either system. Similarities between the systems allow this thesis to draw on findings of prior U.S. rulemaking scholarship and the theories developed by scholars in that jurisdiction. Summarising the legislation, rules and processes used to develop the Australian building code, then providing a similar summary of rulemaking by
U.S. administrative agencies under the requirements of the Administrative Procedure Act (1946) identifies similarities and differences between the two systems. These two systems are then examined in parallel in the context of participation throughout the rulemaking process.

3.4.4.1 Australian Legislative Instruments Act and Intergovernmental Agreements

The processes used by the Australian Building Codes Board to develop the building code are set by the content of an intergovernmental agreement. The legislative power for this agreement is established through Australia’s Legislative Instruments Act (Legislative Instruments Act (Cth) 2003).

Australian law is made in Parliament through legislative process (Administrative Review Council 1992). The power to make regulations, rules, by-laws, orders, ordinances, instruments or determinations (Commonwealth of Australia 1999) can be delegated from Federal Parliament to the executive arm of government (Administrative Review Council 1992) through the Legislative Instruments Act 2003 (Cth). This Act sets conditions on this legislative processes including the encouragement of rule makers to consult with experts and with those affected by the regulatory outcomes (Australian Government Solicitor 2014).

The regulation of buildings is not covered by Australia’s constitution, so historically its responsibility fell to State and Territory jurisdictions (Australian Uniform Building Regulations Coordinating Council 1991). Unification of these diverse State-based building requirements began in 1964 (Inter Jurisdictional Regulatory Collaboration Committee 2010) and led to iterations of national committees and variations of a uniform code (Blackmore 1990; Blackmore 1989; Foliente 2000; Knox 1989b). The first unified Australian Building Code was published in 1988. This predated obligations for national adoption, but was voluntarily accepted by individual States across Australia (Australian Uniform Building Regulations Coordinating Council 1991; Lovegrove et al. 1991).

Australia’s Legislative Instruments Act provides a pathway for administrative issues that fall outside the Constitution to be managed within a single national administrative agency created by an intergovernmental agreement (Administrative Review Council 1992). These agreements between the Commonwealth, States and Territories set prescriptive procedures for the development of standards and codes, and may include requirements for consultation and legislative scrutiny (Administrative Review Council 1992). While not legislative instruments in their own right, intergovernmental agreements bind government parties to adopt the rules developed under the administrative processes of these agreements into their own legislative instruments (Commonwealth of Australia 2012), and thereby provide uniform promulgation across jurisdictions.
In 1990, the Australian Uniform Building Regulations Coordinating Council (1991) established a project to develop a model building act for uniform national regulation. Weighing up regulatory options which included Commonwealth legislation, constitutional amendment, and referral of legislative power from the States to the Commonwealth (Australian Uniform Building Regulations Coordinating Council 1991), the Council recommended unification using an intergovernmental agreement. This legislative pathway was selected for its acceptability to different levels of government and demonstrated successful implementation in food regulation (Australian Uniform Building Regulations Coordinating Council 1991).

The Council’s recommendation developed into a 1994 Intergovernmental Agreement\(^4\) between the Commonwealth, States and Territories, establishing the Australian Building Codes Board and its processes for developing a unified Australian building code (Australian Building Codes Board 2013). The Agreement outlines three key frameworks to facilitate uniform building regulation across Australia; establishing an administrative agency to manage a uniform building code, setting governance and operating processes for development of that code, and obligating the State and Territory signatories to the uniform adoption of the developed code into their regulation (Commonwealth of Australia 2012).

The original 1994 Agreement created the Australian Building Codes Board as the administrative agency and arbitrating body for the content of Australia’s building code with ultimate responsibility to a forum of Building Ministers from each State, Territory and the Commonwealth\(^5\) (Commonwealth of Australia 2012). This administrative agency manages development of the Building Code of Australia (Australian Building Codes Board 2012c) which is fundamentally a codification, or standardisation, of technical and administrative requirements, but does not have legislative authority in its own right (Australian Uniform Building Regulations Coordinating Council 1991). It is adopted into regulation through commitments in the Intergovernmental Agreement which obligate each government party to ‘consistent application of the National Construction Code across and within each State and Territory’ (Commonwealth of Australia 2012, p. 2).

The development of Australian regulation under the delegated power of a prescriptive intergovernmental agreement may provide evidence which is comparable to regulation made under the U.S. Administrative Procedure Act (1946).

\(^4\) Intergovernmental agreements are used by a range of administrative agencies in Australia. To simplify drafting in this thesis, future reference to Intergovernmental Agreement, unless stated otherwise, refers to the 2012 agreement establishing the Australian Building Codes Board (Commonwealth of Australia 2012).

\(^5\) The structure is outlined in Figure 1-1.
3.4.4.2 United States Administrative Procedure Act

Processes for rulemaking and provisions for participation in the development of regulation by U.S. administrative agencies are set by the requirements of the Administrative Procedure Act (1946). This Act manages the power delegated to a wide range of administrative agencies to make regulations (Coombs 2002) and represents Congress’ attempt to make administrative agency ‘decision making procedures open, accessible and fair’ (Croley 2000, p. 47). It was catalysed by the increased activity of interest groups and their prominence in rulemaking decisions, and developed to the point where it now has a ‘ubiquitous presence in virtually all government programs’ (Kerwin 2003, p. 2). The administrative procedures described by this Act (1946) combine legislation, judicial decision, and agency practice (Garrett 2000) and can be summarised into core elements of accountability, participation and information (Kerwin 2003).

Accountability is primarily provided through the process of judicial review (Kerwin 2003). In the U.S. those affected by rulemaking decisions may challenge the administrative agency through the courts (Administrative Procedure Act 1946). In reviewing decisions, the U.S. courts do not challenge the technical expertise of agencies, but instead measure the rational basis for their rules (Harter 1982). This is based on an agency’s reasoning, its response to material comments from participants and its review of alternatives (Coombs 2002). The importance placed on how the administrative agency responds to participant comments implies the important role participants play in U.S. rulemaking.

Participation is prescribed by ‘notice and comment’ procedures outlined in section 553 of the Act (1946). This requires rulemaking agencies to publish notices of proposed rules in the publicly available Federal Register, and provide a period of time for participants to submit comments against those notices (Kerwin 2003). U.S. agencies have reasonable freedom in their implementation of these participative procedures, but the Act establishes ‘a floor, below which no agency could fall in its interactions with the public’, trusting them to fashion ‘structures and procedures for public participation within the loose constraints of the Administrative Procedure Act’ (Kerwin 2003, p. 54).

Information is key when setting regulations (Breyer 1982), with the participative ‘notice and comment’ procedure described in the Administrative Procedure Act (1946) reflecting two information flows. The first communicates proposed regulation changes to those who may be affected. The second seeks information from participants which will be used by the administrative agency in reaching its decisions (Kerwin 2003).

The requirements of the U.S. Administrative Procedure Act (1946) set a minimum process for rulemaking by the administrative agencies of executive government (Kerwin 2003). This stable, longstanding administrative process has provided opportunities for academic study (West 2005) and
its transparent ‘notice and comment’ procedures have produced a public record of interaction between administrative agencies and external participants. Initiated by Furlong’s (1997) research into interest groups and Golden’s (1998) landmark work on ‘notice and comment’, the availability of this public record has formed a catalyst for extensive research into participation in U.S. rulemaking (Rinfret & Cook 2014b).

3.4.4.3 Administrative Procedure Act and Intergovernmental Agreement Similarity

Although the U.S. and Australian legislative systems ‘developed along quite different lines’ (Coombs 2002, p. 25), participative aspects of the specific rulemaking process implemented by executive government appear to be similar.

At a legislative level, the Australian system places elected government as superior to executive government, and a ‘lack of formal consultative processes is a definite gap in the Australian rulemaking process at the federal level...’ (Coombs 2002, p. 27). Delegated rulemaking in Australia has a smaller role than the U.S. and is subservient to the processes of Parliament (Coombs 2002). In the U.S. the role of Congress in rulemaking is almost non-existent (Coombs 2002) and significant resources are applied to the delegation of regulation development to administrative agencies with an emphasis on consultation (Administrative Procedure Act 1946).

But whilst Australia’s legislative processes lack open participation (Coombs 2002), the participative processes set by the Intergovernmental Agreement set formalised requirements for direct industry and public participation (Productivity Commission 2004, p. 324). When developing the processes to set regulation under intergovernmental agreements, the Australian Government was concerned at the potential exclusion of parliamentary oversight (Administrative Review Council 1992). To offset this potential the Administrative Review Council (1992) proposed that rulemaking through intergovernmental agreement require professional drafting, mandatory consultation, and publication of instruments (Administrative Review Council 1992). These characteristics demonstrate similarities to the delegation of regulatory power in the U.S. Administrative Procedure Act (1946), which does not directly authorise agencies to regulate, but ‘serves as an agency’s decision making template’ (Croley 2008, p. 81) requiring participation and consultation.

The Intergovernmental Agreement sets detailed objectives for the Australian Building Codes Board and prescriptive requirements for the processes it uses in the development and administration of the building code (Commonwealth of Australia 2012). These prescriptive processes can be compared to equivalents used by rulemaking agencies under the U.S. Administrative Procedure Act (1946). Both include administrative processes which define specific stages when participation can occur. Development and revision of Australia’s building code follows formal procedural steps
outlined in Figure 3-2 with participation at initiation, technical review and public comment stages. Rulemaking in the U.S. is summarised into three stages (Wagner, Barnes & Peters 2011); pre-proposal, when the content of the new rule is developed by the agency; notice and comment, when the proposed rule is published for public comment; and post promulgation, the period after promulgation when rules may be revised. The similarities and differences between each rulemaking system were evaluated at these three stages.

The pre-proposal stage covers the framing and identification of issues, inclusion of those issues onto the regulatory agenda, prioritisation, identification of alternatives, setting the language of the final rule, and justifications (West 2009). Activities through this stage are similar between the two rulemaking systems except for the formality and documentation of the participative processes. The initiation of change proposals for Australia’s building code is open to anyone (Australian Building Codes Board 2012e). Through its prescriptive procedures (Australian Building Codes Board 2012a) instigation of a change by a proponent identifies the options and impacts of that change, and adds the issue to the administrative agenda. In the U.S. participation at this stage is at the discretion of the administrative agency (Kerwin 2003). The absence of formal U.S process at this stage is identified as a black box (West 2009) which has proved a limitation on empirical study (Rinfret & Furlong 2012). Australia’s formalisation of this stage may provide new information to research not available from prior rulemaking research and afford knowledge about a stage of rulemaking ‘shaded’ from study in the U.S. (Wagner, Barnes & Peters 2011).

The U.S. ‘notice and comment’ stage and Australian public comment are significantly similar. In U.S. rulemaking this stage is identified as the most basic and important participation point (West 2005), with much of the cited U.S. literature drawing on empirical evidence from this requirement in the Administrative Procedure Act (Rinfret & Cook 2014b; West 2005). U.S. administrative agencies follow three steps for ‘notice and comment’, publishing notices of proposed rulemaking, inviting comments from interested parties, and providing opportunity for those parties to comment on the proposed rules (Kerwin 2003). Received comments are considered, and the agency issues a statement explaining its final decision in light of those comments (Croley 1998). The Australian Building Codes Board (2015c) adopts similar procedures, where a draft of proposed changes is published, any party is invited to submit comments, and those comments are reviewed through formal administrative processes.

After ‘notice and comment’, but before publication of the final rule, regulatory impact analysis occurs in the administrative systems of both jurisdictions (Breyer 1982; Department of the Prime Minister and Cabinet 2014). In Australia, this is performed through preparation of a Regulation
Impact Statement (RIS), which follows a predominantly quantitative process including risk analysis, cost-benefit analysis, measuring business compliance costs and ascertaining potential effects on competition (Council of Australian Governments 2007; Department of the Prime Minister and Cabinet 2014). The Australian Building Codes Board has embedded the essential elements of regulatory impact into its processes (Productivity Commission 2012).

Through their accountability to the President, administrative agencies in the U.S. are also required to develop regulation impact statements (Kerwin 2003). These set out alternative ways of achieving a regulatory objective and justify the selected action as better than any alternative (Breyer 1982; West 2009). Oversight is provided by the White House Office of Management and Budget, whose mission includes ‘coordination and review of all significant Federal regulations by executive agencies, to reflect Presidential priorities and to ensure that economic and other impacts are assessed as part of regulatory decision-making’ (White House Office of Management and Budget 2015). The processes to measure regulatory impact, including external review by a government agency independent of that making the rules, are therefore similar between U.S. and Australia.

Post promulgation is the last stage in U.S. processes (Wagner, Barnes & Peters 2011). The U.S. courts are active in the oversight of rulemaking by Federal agencies (Kerwin 2003) and the high possibility for judicial review of decisions made under the Administrative Procedure Act provides administrators with a strong incentive to consider and balance all relevant information (Croley 2008). Forms of judicial review are also applied to rules promulgated through Australia’s building code, with evidence of review occurring through Royal Commissions (Teague, McLeod & Pascoe 2009) and civil cases (The Owners - Strata Plan No 69312 v Rockdale City Council & Anor; Owners of SP 69312 v Allianz Aust Insurance 2012). Accordingly, the potential for judicial review of rulemaking decisions provides an opportunity to influence or change rulemaking outcomes in both Australian and U.S. systems.

Rulemaking delegated to the Australian Building Codes Board through prescriptive requirements of its Intergovernmental Agreement presents similarities to processes applied under the U.S. Administrative Procedure Act (1946) (Coombs 2002). Implementation of processes during pre-proposal, public comment, regulatory impact and post promulgation stages show parallels between the two administrative systems. Philosophies of consultation and participation in U.S. rulemaking (Kerwin 2003) are also reflected in the Intergovernmental Agreement recitals (Commonwealth of Australia 2012) and in the regulatory approach promoted by Australia’s Office of Best Practice Regulation (2007).
The similarities identified between the two systems suggest that this research analysing the administrative processes of the Australian Building Codes Board may be informed by U.S. rulemaking literature evaluating practices under the U.S. Administrative Procedure Act (1946). Further, the similarity of processes may also allow findings from this Australian study to provide new knowledge pertinent to rulemaking literature and theory developed in the U.S. context.

3.4.5 Summary of Research Methodology
The research design applied a formative evaluation of participation in administrative process. Analysis of documented historical changes to Australian building code concentrated on a single policy area allowing in-depth contextual analysis. Inductive approaches were used to categorise the available data, with categories extended throughout analysis to capture new information. Interpretation drew on categorical aggregation techniques to provide new insight. This methodological approach, drawing on documented interactions between participants, aligns with Lincoln’s (1991) perspective for a constructionist epistemology to present the ‘multiple, holistic, competing and often conflicted realities of multiple stakeholders’ (p. 73).

3.5 Research Methods
Continuing along Crotty’s (2003) framework (Figure 3-1), this chapter now addresses the specific design of the research method.

Prior rulemaking studies found difficulty measuring the effectiveness of participant involvement (Furlong 1997; Golden 1998; West 2004) and disagreed over the decision stages and information sources to be analysed (Rinfret & Furlong 2012; West 2009). Difficulty accessing the internal records of administrative agencies limits the majority of U.S. rulemaking research to examination of the ‘notice and comment’ stage after the proposed rule is developed (Rinfret & Cook 2013), thus studying an agency’s output rather than its processes. This is in spite of Patton’s (2002) view that in program evaluation, analysis of outputs is of less value than analysis of implementation. The evaluation methods used in this research provided insight to implementation by including all stages of the rulemaking process, analysing data from rule initiation through to publication (Furlong 1997).

Observation of past rulemaking research also found it allowed only qualified conclusions (Croley 2008) with limitations traced to studies being ‘divorced from concrete observations’ (West 2005, p. 662). This is reflected in Kerwin’s (2003) observation that studies using the official records of government agencies are rare. This research overcomes this limitation by analysing the official administrative records of the Australian Building Codes Board. The method aligns with West’s (2005) recommendation that further understanding of participation in rulemaking may be
established by the researcher becoming ‘immersed in a particular rule or small sample of rules’ from an individual administrative agency (2005, p. 662).

3.5.1 Selection and Application of Case Study Technique

This research analysed the documented processes of the Australian Building Codes Board as a single instrumental case study. When evaluating a case study, ‘the program, person or agency being evaluated is the case’ (Stake 1995, p. 95) which may be complex and cover ‘a village, neighbourhood, organisation or program (Patton 2002, p. 297).

Although the data set captured 192 separate proposed changes to Australia’s building code, both Stake (1995) and Patton (2002) acknowledge that the overall program or agency studied can constitute the case boundary. ‘A single case study is likely to be made up of many smaller cases – the stories of individuals, families, organisational units and other groups’ (Patton 2002, p. 297). These smaller studies within a single case can address units of analysis including individuals, groups, activities or periods of time (Patton 2002). This research method therefore treated the proposal for change documents as the smaller cases described by Patton (2002) and the administrative processes of the Australian Building Codes Board as the single bounded system (Stake 2000). The actors participating in the administrative process and time period analysed established the boundary conditions for that single system.

Case study analysis looked to explore the relationship between this administrative agency and participants as opposed to measuring their ‘mere presence in various decision making fora’ (Croley 2008, p. 132). While some case studies comprise of interview or observational techniques, a review of existing documents is an acceptable case study approach (Stake 1995). It was used in the design of this research because it allowed analysis of each rulemaking decision from initiation through to publication, identified as a gap in prior U.S. studies (Rinfret & Cook 2013). Guenzi and Storbacka (2015) identify that respondent research may only present one amongst many perspectives, and individual responses may not be able to represent complex situations. Documentary case study analysis captured input from every participant for all rulemaking decisions over the four years studied, which was not feasible using interview techniques.

Case study analysis was applied following Stake’s (1995) guidance to analyse documents using the same thinking as when interviewing. Documents can ‘serve as substitutes for records of activity that the researcher could not observe directly’ (Stake 1995, p. 68), and ‘gathering data by studying documents follows the same line of thinking as observing or interviewing’ (Stake 1995, p. 68). In observational case study, observers effectively aggregate instances during observation, and draw
interpretation through that process (Stake 1995). This approach, termed ‘categorical aggregation’ (Patton 2002) was applied to capture information from the document-based sources used in this case study.

Studying Australian rulemaking practice in order to evaluate whether it encourages participation in context to Crolely’s (2008) administrative process theory corresponds to Stake’s (1995) description of an instrumental case study. Treating the documented decisions of the Australian Building Codes Board as the data to examine under a single case study allows an understanding of the administrative processes and relationships used in this case (Stake 1995), instrumental in extending understanding of administrative process theory. By focusing analysis on decisions by a single administrative agency in one area of regulation, it also addressed the lack of context identified in prior rulemaking studies (Kamieniecki 2006b; West 2005).

3.5.2 Data Preparation and Structural Coding

As identified in the methodology section of this chapter, inductive analysis started with a deductive preparation phase (Elo & Kyngas 2007). This applied a pre-defined framework for the analysis of building code development with respect to the participants initiating change, regulatory drivers and outcomes.

Development of this framework drew on information submitted by proponents through the Australian Building Code Board’s proposal for change process (Australian Building Codes Board 2012a). These proposals are submitted using a template of eight questions (sample provided in Appendix 1) thereby providing a common platform for the initial coding and analysis. This template includes open-ended questions similar to questionnaires used in other qualitative studies (Marshall & Rossman 1989).

The proponent’s details, organisational associations and the nature of the proposal were ascertained from the submitted template and used to categorise the source and initiating character of each change proposal (Table 3-4).

The proponent’s responses to each question in the change proposal template were analysed to determine the nature of the organising problem which is driving the proposed change (Sheehy & Feaver 2015). Each proposal was coded using concepts developed by Sheehy and Feaver (2015) where the underlying problem driving regulatory change was classified into one of three types: social, risk and opportunity. Social issues call for regulatory response to address potential impacts on the whole of society, and may include issues which affect societal advancement, as well as systemic harms. Regulatory responses to social issues seek outcomes which advance a societal goal
leading to a public good. Risk problems drive regulatory change in response to an adverse event or the potential for adverse events to occur. The organising problem was categorised as an opportunity when the resulting regulatory change responded to an opportunity to provide benefit to individuals or society as a whole. Initial categorisation of each change proposal in accordance with its regulatory drivers allowed early identification of issues which influence participation in rulemaking, differentiating those with material impact, such as life safety issues, from those of an administrative nature.

<table>
<thead>
<tr>
<th>Initiating Characteristic</th>
<th>Source of Initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective</td>
<td>Initiated by the Australian Building Codes Board and driven by error correction or minor technical amendments.</td>
</tr>
<tr>
<td>Administrative</td>
<td>Initiated by the Australian Building Codes Board and driven by policy.</td>
</tr>
<tr>
<td>Administrative</td>
<td>Initiated by other Governments or agencies.</td>
</tr>
<tr>
<td>Industry led</td>
<td>Initiated by recognised industry or professional bodies.</td>
</tr>
<tr>
<td>Independent</td>
<td>Initiated by individuals or individual organisations.</td>
</tr>
</tbody>
</table>

Table 3-4: Initiating Characteristics and Source

The initiating proposal was also tracked throughout the administrative process to establish whether the proposal resulted in changes to the published building code. The regulatory spectrum defined by the Office of Best Practice Regulation (2007) was applied to characterise both regulatory and non-regulatory outcomes into four broad pathways (Table 3-5).

<table>
<thead>
<tr>
<th>Regulatory Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codification</td>
<td>Where the proposal results in a change made to the published Building Code of Australia.</td>
</tr>
<tr>
<td>Informative</td>
<td>Where the change is published through non-mandated (informative) documents including the Guide to the Building Code or information handbooks.</td>
</tr>
<tr>
<td>Alternative</td>
<td>Where the problem is returned to industry for self-regulation or passed to other government bodies.</td>
</tr>
<tr>
<td>Rejection</td>
<td>Where the proposal is rejected.</td>
</tr>
</tbody>
</table>

Table 3-5: Regulatory Outcomes

The proposal’s initiating characteristic (Table 3-4), organising problem and regulatory outcome (Table 3-5) was then combined and applied as the pre-defined framework for first cycle structural coding (Saldana 2013). These formed the preparation phase for inductive analysis (Elo & Kyngas 2007), with the coding structure shown diagrammatically in Figure 3-4.
The categories developed from the application of this initial framework were used to develop qualitative insights about the dataset (Stake 1995) with coding then extended in response to patterns discovered in the data (Elo & Kyngas 2007). While subsequent analysis drew on qualitative interpretation of the data in the change proposals to a minor extent, the overriding conceptual load relied on Stake’s description of categorical aggregation, counting instances after the information in the change proposals was coded into categories (Stake 1995).

### 3.5.3 Computer Assisted Analysis

Theory-building packages such as NVivo (QSR software) were considered for the automation of analytical tasks. However, review following a pilot study of data indicated that suitable qualitative understanding using categorical aggregation was possible using manual coding techniques.

Although speed of analysis may be increased using computer assisted techniques, there was a risk of losing transparency and straying from the interpretive perspectives of this study. Based on the
‘black box’ nature of these packages and difficulty in selecting the right package (Patton 2002), it was decided that computer assisted analysis, while potentially faster, would add no analytical value.

The research design used Microsoft Excel for consolidation and categorisation of the data sources identified in Figure 3-3. IBM’s SPSS statistics software, version 22, was used for categorical aggregation of data from the Excel database and generation of the cross tabulations used in analysis.

3.5.4 Development of a Graphical Analysis Model

Drawing insights from large cross-tabulations presented a research design challenge. Large multi-variable tables may not effectively communicate the complex relationships between coded variables. To address this problem, the diagrammatic representation of the cross-tabulated results using a decision tree layout provided a count of aggregated cases as the change proposals progress through the rulemaking process. An example of this diagram is shown in Figure 3-5.

![Decision Tree Diagram](image)

**Figure 3-5: Example of Graphical Representation of Cross Tabulated Data**

A diagrammatical presentation developed to provide insight to the output of complex cross tabulation results.

Source: Developed by the author
Translating outputs of cross-tabulations from the statistical analysis software to this visual representation provided a clearer picture of the pathway from proposal through to building code publication, enabling identification of the actions and influence of participants at each stage of the administrative process.

### 3.6 Suitability of the Research Design

The formal procedures used in the development and revision of Australia’s building code represent a structured and stable administrative process which allowed all stages of rulemaking to be studied in practice. This research design applied inductive analysis to the administrative records generated by these processes to ‘discover important patterns, themes and interrelationships’ (Patton 2002, p. 41). This approach was selected for its alignment with calls by regulatory scholars to pay increased attention on the relationship between the stages of rulemaking (West 2005) and better understand processes within the administrative agency prior to publication of draft rules (West 2009). Scholars in the field also suggest a focus on a single rulemaking area (Yackee 2014) where the researcher was able to become immersed in a ‘small sample of rules’ (West 2005, p. 662). The selected approach aligns with the techniques of formative evaluation (Patton 2002) proposed for this study and addresses the specific concerns arising from earlier research in the field.

#### 3.6.1 Alignment of Elements in the Research Process

The design of this research followed Crotty’s (2003) framework linking four elements of the research process (Figure 3-1). This generic framework is now populated with details developed through this chapter, outlining epistemology, theoretical orientation, methodology and analytical method as they apply to this thesis (Figure 3-6).

![Figure 3-6: Elements of Research Design Applicable to this Thesis](source)

A reproduction of Crotty’s framework populated with the research approaches used in this thesis.

*Source: Adapted from Crotty (2003)*
The final step in the research design process was to establish the suitability of the proposed design to the research problem and aim. This evaluated trustworthiness, theoretical application, generalisability and limitations.

3.6.2 Trustworthiness
There is no set formula for analysis to transform data into research findings (Patton 2002). Research strategies and guidelines are adapted to each specific analytical task with the proviso that researchers ‘have an obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possible (Patton 2002, p. 434). In this research, the role of monitoring was facilitated through maintenance of a research journal to record the analytical process, along with notes, comments and the findings generated. This journal captured the inductive development of coding categories and was used to develop the tabulated coding summary provided in Appendix 2.

Verification and validation was recognised as important when demonstrating the trustworthiness of research findings (Patton 2002; Stake 1995; Stake 2000). This study drew on documented data sources rather than direct observation. Although reliance on these pre-existing written documents minimised requirements for validation of data collection, the researcher was aware that some interpretation of data would be applied, which required verification. Where this is identified, the analysis provided transparency by clearly specifying the coding and categorical aggregation techniques used (Stake 1995). In instances where interpretation beyond categorical aggregation was applied, such as extending understanding of the influences which led to inclusion of other participants in decision making in Chapter Five, mini-case reviews are presented. These provide detail of the interpretative process and transparency about the underlying data sources.

The researcher also identified potential bias due to his prior expertise in the administrative processes used for Australia’s building code, and membership of the technical Building Codes Committee during the period of study. The research design addressed this potential bias by applying analysis through techniques of categorical aggregation (Stake 1995) using documentation collated by the administrative processes of the Australian Building Codes Board, thus minimising direct researcher interpretation.

3.6.3 Suitability of Administrative Process Theory for Study of Australian Rulemaking
This research focused on administrative rulemaking delegated from the legislature (Coombs 2002), analysing Australian practice through the theoretical lens of administrative process theory (Croley 2008). It was approached from a proposition that given the right conditions, rulemaking by administrative agencies can lead to public interested regulatory outcomes (Croley 1998, 2000, 2008).
The applicability of Croley’s (2008) theory as a theoretical model suited to the aim of this research and study of Australian rulemaking is argued from three perspectives. Firstly, administrative process theory provides a suitable academic lens to generate findings which may be implemented as changes to the Australian rulemaking process. Secondly, a case study of the Australian Building Codes Board processes may add new evidence to theoretical understanding. Thirdly, the methodological development in this research may extend the knowledge base of regulatory scholarship.

3.6.3.1 Implementable Findings

An expectation of applicability is seen in regulatory theory, and ‘whether it offers assistance in addressing the challenges that regulators face in practice’ (Baldwin & Black 2008, p. 59) or delivers findings that assist agencies in the selection of processes to encourage participation (Daley 2012). It was anticipated that administrative process theory offered a lens for case study analysis which would provide findings that may assist the Australian Building Codes Board to refine future practice.

Croley (1998) illustrates the focus of administrative process theory on supporting implementable outcomes by posing specific questions regarding the theory’s role in decision making. These questions align with the objectives set for the Australian Building Codes Board by the Intergovernmental Agreement (Commonwealth of Australia 2012) with the related objectives shown in Table 3-6.

Croley’s (1998) participatory question corresponds to building code objectives to encourage participation, including specific references to industry, stakeholders, and fora to explore alternatives to regulation. Informational needs are recognised through the Intergovernmental Agreement’s call for rigorous process, alignment to societal needs, and its flexibility to establish technical committees as required. Latitude is provided through clauses which allow the Australian Building Codes Board to balance Ministerial requirements with societal needs and explore alternatives to maximise net benefit.

The alignment between Croley’s (2008) theory and the current practices of the Australian Building Codes Board suggests administrative process theory provides a relevant theoretical framework of the administrative agency’s objectives. Research outcomes generated by applying this theory may deliver implementable findings.
### Croleys Questions on the Role of Administrative Process.

<table>
<thead>
<tr>
<th>Participatory - Do administrative processes seem likely to encourage participation in regulatory decision making by whomever the theory contemplates will affect the shape of regulatory outcomes?</th>
<th>Raise awareness of, and provide information to industry and relevant stakeholders on, the development of the National Construction Code. Encourage reduced reliance on regulation by providing a forum to explore alternative mechanisms for delivering outcomes. There shall be a Building Codes Committee to provide advice to the Board.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational - Do processes seem well tailored to generate whatever type of information the theory contemplates regulatory decision makers require?</td>
<td>Develop codes having regard to societal needs and expectations. Apply a rigorously tested rationale for determining regulation. Consider the competitive effects on industry. Establish technical committees as required.</td>
</tr>
<tr>
<td>Latitude - Do processes allow decision makers sufficient legal and political latitude for producing the regulatory outcomes that the theory envisions?</td>
<td>Develop codes and standards that accord with strategic priorities established by the Ministers, having regard to societal needs and expectations. Ensure there is no alternative to regulation (whether under the responsibility of the Board or not), that would generate higher net benefits.</td>
</tr>
</tbody>
</table>

Table 3-6: Alignment between questions of administrative process and objectives of the Australian Building Codes Board

**Source:** Adapted from Croleys (1998, p. 8) and Intergovernmental Agreement (Commonwealth of Australia 2012)

### 3.6.3.2 Extension of Theoretical Understanding

The next aspect in considering the suitability of administrative process theory for this research was whether case study of Australian rulemaking will extend understanding of the theory itself. Garrett (2000) expresses a view that further developments in Croleys administrative process theory ‘promise to make significant contributions to the study of administrative law and theory’ (2000, p. 154), noting that other scholars will present case studies allowing the theory to be evaluated in different contexts. Croleys (2008) himself finds there is little that can be generalised about participation and influence in rulemaking, and calls for further study in the context of particular agency initiatives. Case study analysis of Australia’s building code may provide one such context, and constitute a contribution to further evaluation of Croleys (2008) theory. It was expected that this research may deliver this contribution through two facets, durational extension and qualification of conditional parameters.

Extending analysis across the entire duration of the rulemaking process addressed an identified lack of research during the pre-proposal stage of rulemaking. This is important as it is this stage where the language of the proposed rules is set (Rinfret 2011; Rinfret & Furlong 2012) and participants...
influence the drafting of rules rather than only commenting on the drafting of others. Applying Croley’s (2008) theory from the initiation of a change through all processes of building code development will include the pre-proposal stage, and may contribute new information.

Croley (2008) posits that if a rulemaking process is to deliver outcomes in the public interest, it should satisfy a condition to encourage participation. However he does not explore processes to implement that condition, nor specify whether those outcomes are contingent on the successful implementation of that condition. This research contributes to Croley’s (2008) theory through empirical study of the condition to encourage participation and the extent to which it is achieved by the rulemaking processes setting Australia’s building regulation.

3.6.3.3 Extending Regulatory Scholarship
The final consideration for the suitability of this research approach was whether it would extend regulatory scholarship. Prior studies of U.S. rulemaking show differing approaches to methodology, to the stages of the process studied, and to the types of rules used for data collection (Rinfret & Furlong 2012). Existing studies have provided insufficient attention to the context or the implication that technical and political domains may have on analysis (West 2005). In addition, earlier approaches have focussed on the inputs and outputs of the ‘notice and comment’ process, where more understanding of the motives that drove decisions to change a rule is needed (West 2005). As Nixon et al. identify, ‘interest group influence over specific regulatory decisions generally has not been documented in a careful manner, taking into account the institutional structure that shapes the bureaucratic policy making process’ (2002, p. 60).

Study of Australian Building Codes Board processes through the framework of administrative process theory may help to reduce the limitations identified by these prior scholars, and extend understanding of rulemaking. Immersing study in the single domain of building regulation through case study analysis of every rulemaking decision over a four-year timeframe removes the variables of the agency studied (where more than one administrative agency has been the subject of the research) and the selection of rules for analysis. The four year period selected for study provided a stable administrative environment with consistent rules and procedures, further reducing external variables. Combining regulatory inputs and outputs with minuted discussions of decision making committees allowed the research to explore the influence of participants and infer the motives that drive change.
3.6.4 Limitations of Research Design

The general limitations for this thesis are provided in the limitations section of Chapter One. The following are limitations pertinent to the methodology and research design which have potential impacts on the findings and applicability of this study.

The research drew on administrative documents recording the process used to initiate, review and enact changes to Australia’s building regulation between the dates of March 2009 and March 2013. These dates are established by two external events with implications for the selection of data. An Australian Productivity Commission review of the building industry (Productivity Commission 2004) and the publication of the Office of Best Practice Regulation handbook (Office of Best Practice Regulation 2007), resulted in changes to the administrative processes used by the Australian Building Codes Board over the following year. To ensure data represented a stable administrative process, change proposals submitted prior to the first Building Codes Committee meeting in 2009 were excluded.

In 2014, the Australian Building Codes Board announced that the National Construction Code, including the Building Code of Australia, would change from an annual revision cycle to a three yearly cycle, starting from the 2016 revision. Participant reaction to that announcement resulted in an increased quantity of change proposals submitted through 2015. To exclude the atypical effect of this announcement, the data collection is limited to the last complete revision cycle for the Building Code published in May 2014.

This thesis did not attempt to measure the efficacy of Australia’s building regulations, judge their suitability, or evaluate of their societal alignment. Measuring regulatory outcomes is challenging (Croley 2000). Their value is not always evident (Baldwin, Cave & Lodge 2012), it is difficult to identify what is in the public’s interest (Garrett 2000) and participant motivation differs across domains (Kamieniecki 2006a). By using formative evaluation and a constructionist theoretical perspective, this research focused on the implementation of an administrative program, rather than an evaluation of its outcomes (Patton 2002).

Analysis of the data provided by the Australian Building Codes Board was applied to evaluating the rulemaking process. Findings were limited to understanding the effects of administrative process on participation, answering Croley’s (2008) call for research to identify conditions where public interested outcomes are expected, and Garrett’s (2000) call for case studies to add new insights to Croley’s theory.
3.6.4.1 Generalisation and Application Findings

Findings from evaluation research are generally judged by their usefulness in the context of the study’s setting (Patton 2002). The methodology of formative evaluation lies mid-way on Patton’s (2002) theory to action continuum, meeting applied research objectives to inform change in rulemaking practice but not excluding the abstraction of findings to theory. Tranfield and Starkey recognise that management research should fulfil this dual role, being ‘both theory sensitive and practice led’ (1998, p. 349). This thesis is applicable in both theory and practice.

The work’s contribution to theoretical insight is provided by the immersive nature of the instrumental case study method (Stake 1995) and the approach of analysing official administrative agency records (Kerwin 2003), thereby meeting Croley’s (2000, 2008) call to extend his theory by understanding participation in rulemaking through contextual analysis. Its contribution to practice is made through the application of findings to suggest changes in the current processes used to develop Australia’s building code.

3.7 Summary of Chapter Three

This chapter has defined the theoretical perspective and explained the methodology and methods used to serve the research aims and objectives. As rulemaking in building regulation is enacted by participating actors, an interpretivist perspective and constructionist epistemology guided the research design and philosophy.

The method development assessed the methods used in earlier studies in the field. The researcher chose to investigate the influence of administrative process on actor participation across all stages of rulemaking using formative evaluation techniques. This investigation was undertaken as an instrumental case study of pre-existing information, treating the Australian Building Codes Board and its administrative processes as a single bounded system. The categorisation and coding of the case study data was inductive, but followed a deductive preparation phase applying an initial coding framework developed from the literature review.

The methodology developed in this chapter allows this research to contribute to both theory and practice. At a theoretical level, the findings may provide new contextual understanding of Croley’s (2008) administrative process theory and the condition that participation be encouraged in order to deliver regulatory outcomes in the public interest. In practice, the research will evaluate implementation of this administrative program against its documented policy objectives and may provide findings which inform future processes used by the Australian Building Codes Board.
Chapter 4. Analysis of Participation

4.1 Chapter Outline

The analysis and discussion component of this thesis is presented across three chapters. This chapter covers the theoretical aspects of regulation and rulemaking, and Chapter Five analyses the practical implementation of administrative processes across all stages of rulemaking against the policy objectives set for the Australian Building Codes Board. Findings from the analyses in both chapters are then discussed in Chapter Six, presenting them in context of administrative process theory and their implications for current rulemaking practice.

4.1.1 Structure of this Chapter

The literature review highlighted the importance of identifying the actors in the rulemaking process, illustrating variations in the descriptive terms used and the differing approaches to their segmentation. Therefore, before embarking on the analysis of individual research questions, the first section in this chapter characterises regulatory actors in the rulemaking process and divides them into groups.

The remainder of this chapter aligns with the research questions detailed in Chapter One. Each section addresses an individual research question, outlines the analytical approach taken, reports the results, and closes by answering the question with a summary of observations and findings.

4.2 Identification and Grouping of Regulatory Actors

Identifying actors\(^6\) in the rulemaking process is difficult (Daley 2012). Rulemaking studies have employed a range of approaches to characterise participants and segment them into groups (Houle 2010; Rinfret 2011; West 2004; Yackee 2014). To identify and characterise actors in the context of building regulation, this research drew on literature from fields of regulation and administrative rulemaking, along with research specific to building and construction. This developed a list of potential and actual participants and established the reasoning for their selection. In order to analyse the influence of differing information sources on rulemaking, the identified actors were then segmented into groups.

The focus of this thesis is the tension between societal expectations and expert information, with both types of actors included in analysis. A goal of building regulation is to provide ‘socially

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\(^6\) As proposed in Chapter One, actors will be used as a collective term to describe all parties who are, or may be involved in rulemaking, along with those who may be affected by the regulatory outcomes. Potential participants describes a subset of actors whose participation is permitted by administrative process. Participants is reserved to describe those who actually do participate in current process. The term stakeholder will be avoided and used only when directly citing terminology used in other literature.
acceptable performance’ (Inter Jurisdictional Regulatory Collaboration Committee 2010, p. 16) and members of society are therefore considered potential participants in its development. Those expert in the science and technology of building as well as experts in setting regulation were identified as actors who may most affect the regulatory outcomes (Croley 2008), and also included.

Section 2.2.2 of the literature review identified the methods used to segment participating actors by authors studying interest group influence, effectiveness of participation, and submission of public comments in U.S. rulemaking (Furlong 1997; Furlong & Kerwin 2005; Golden 1998). This review is now extended to explore the specific segments developed in this prior research.

Furlong (1997) identified industry, trade associations, unions, citizen groups, and corporations, along with city, state and foreign governments. He later expanded this list to include corporations, financial institutions, interest groups, federal government, state government, municipal government, and government affairs representatives (Furlong & Kerwin 2005). Golden (1998) segmented participating actors into eight groups covering, businesses, unions, citizen groups, individual citizens, professional associations, governments, academics and other. She then divided some groups into smaller segments. Business was split into corporations, trade associations and coalitions. Citizen groups were separated into public interest and advocacy, and she identified government segments by federal and state agencies, congress, and public housing authorities (Golden 1998).

Furlong (1997) and Golden (1998) identified and grouped actual participants in U.S. rulemaking. An alternative approach is to consider segmentation from the perspective of potential participants. This would include regulatory actors who may participate, characterising them in relation to the type of information they might bring to the rulemaking process. Breyer (1982) identifies five sources of information in U.S. standard setting. These are placed in context to this research by relating each to actors identified as potential participants in the development of Australia’s building regulation (Table 4-1).
<table>
<thead>
<tr>
<th>Breyer’s Information Sources</th>
<th>Segmentation of Participating Actors in this Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>Australian Building Codes Board’s administrative office.</td>
</tr>
<tr>
<td></td>
<td>State administrations (Australian State and Territory Governments) responsible for building and construction in their jurisdiction.</td>
</tr>
<tr>
<td></td>
<td>Councils, Shires or City Governments.</td>
</tr>
<tr>
<td></td>
<td>Other government groups not directly involved with building regulation (e.g. Department of Health, Fire Brigades).</td>
</tr>
<tr>
<td>Industry</td>
<td>Independent Companies.</td>
</tr>
<tr>
<td></td>
<td>Industry Associations.</td>
</tr>
<tr>
<td>Independent Consultants</td>
<td>No specific category</td>
</tr>
<tr>
<td>Academia</td>
<td>No specific category</td>
</tr>
<tr>
<td>Consumer Groups</td>
<td>Independent Person – Individual citizens submitting a Proposal independently of other groups.</td>
</tr>
</tbody>
</table>

Table 4-1: Alignment between Information Sources and Participating Actors in U.S. Regulation

Source: Adapted from Breyer (1982, pp. 109-12)

Characterising participants on the basis of information sources and information flows has previously been applied in the area of building and construction innovation, with segments of clients, manufacturers, individuals, firms, the industry, and regulators defined (Blayse & Manley 2004). Gann and Salter (1998) also detail participants based on information flows in building and construction projects (Figure 4-1). These studies identify two segments: regulatory frameworks and technical support infrastructure, relevant to building and construction which were not previously defined in rulemaking studies (Breyer 1982; Furlong & Kerwin 2005; Golden 1998). Their identification in building and construction establishes an informational relationship between regulators and technical experts which may be important to this research due to the regulatory framework encompassing the building code and the technical infrastructure including bodies currently participating in the administrative processes of the Australian Building Codes Board.
4.2.1 Government Actors

Prior U.S. rulemaking research characterises government segments by jurisdiction, differentiating between Federal, State, and Local governments, and the administrative agencies of each (Breyer 1982; Furlong & Kerwin 2005; Golden 1998). However, Australia’s Commonwealth, State and Territory Governments have agreed to joint jurisdiction and responsibility for Australian building regulations (Commonwealth of Australia 2012). This national approach removes geographic divisions and this research therefore grouped government actors based on their formal roles in this joint jurisdiction. The first segmentation level differentiated government actors who are formally recognised or provided with participative roles by the Intergovernmental Agreement (Table 4-2) from other parts of government.
<table>
<thead>
<tr>
<th>Government Actor</th>
<th>Definition Provided by the Intergovernmental Agreement</th>
<th>Role/s and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister</td>
<td>Building Ministers’ Forum - the group of Commonwealth, State and Territory Ministers responsible for building and plumbing regulation</td>
<td>Member of Building Minister’s forum.</td>
</tr>
<tr>
<td>Commonwealth Administrations</td>
<td>Commonwealth department or administrative agency with responsibility for subject matter of this Agreement.</td>
<td>Australian Building Codes Board.</td>
</tr>
<tr>
<td>State and Territory Administrations</td>
<td>Relevant State or Territory department, statutory body, division or administrative agency with responsibility for subject matter of this Agreement.</td>
<td>Administrations Meeting. Building Codes Committee.</td>
</tr>
<tr>
<td>Australian Building Codes Board</td>
<td>A board of ten to sixteen members comprising the head of each Administration, representatives of the building and construction industry, local government, and an independent chair.</td>
<td>The content and revision of the Building Code of Australia.</td>
</tr>
<tr>
<td>Australian Building Codes Board</td>
<td>Officers in the agency of a Commonwealth Department responsible for assisting the Australian Building Codes Board in undertaking its functions and exercising its powers under this agreement.</td>
<td>Chair of Building Codes Committee. Management of building code content.</td>
</tr>
<tr>
<td>administrative office (ABCB Office)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4-2: Government Actors recognised in the Australian Building Codes Board Intergovernmental Agreement**

*Source: Compiled from definitions and clauses in the Australian Building Codes Board Intergovernmental Agreement (Commonwealth of Australia 2012).*

The Building Ministers’ Forum is the overarching body of the Australian Building Codes Board. Chaired by the Commonwealth Minister with responsibility for building (Commonwealth of Australia 2012) its objective is setting policy and establishing strategic priorities for the National Construction Code (Commonwealth of Australia 2016). As this body does not take an active role in implementation of the administrative process it was excluded as a segment in this study.

‘The Administrations’ is a collective term for the parts of State and Territory governments recognised in the Intergovernmental Agreement (Commonwealth of Australia 2012) as holding responsibility for building and construction in their jurisdiction. They are primarily represented by the relevant administrative department, such as Victoria’s Building Authority, reporting to the Minister for Planning (Government of Victoria 2016), or Queensland’s Building and Construction Commission, reporting to the Minister for Housing and Public Works (Queensland Government 2016).
The term ‘ABCB Office’ is used to differentiate the administrative office of the Australian Building Codes Board from the Board itself, which oversees this office. The Board is delegated its authority through the Intergovernmental Agreement (Commonwealth of Australia 2012), and retains the final discretionary power to decide and change the content of the Building Code of Australia. The ABCB Office is a defined term in the Intergovernmental Agreement, describing ‘the part of the Department that is responsible for assisting the Board in undertaking its functions and exercising its powers under this Agreement’ (Commonwealth of Australia 2012, p. 3). In practice, the ABCB Office combines technical experts and administrative staff, implementing the administrative processes studied in this research.

The Administrations and ABCB Office are the two main operational groups identified in the Intergovernmental Agreement and they will form the key government segments used in this research. The remaining government actors were divided into groups based on the categories developed by Gann and Salter (1998) in Figure 4-1. The regulatory framework segment captured those parts of government with geographic jurisdictional responsibility for building, including local councils, shires, cities and municipalities. The technical infrastructure segment included those departments from Commonwealth, State and Territory Governments without direct involvement in, or responsibility for regulating buildings, but with technical overlap. Examples include Departments of Health, with interest in construction of hospital buildings, or Department of Energy Efficiency and Climate Change, with an interest in the energy performance of buildings. This technical infrastructure category also includes organisations and associations representing fire authorities, emergency services, and government research bodies including the Commonwealth Scientific and Industrial Research Organisation.

4.2.2 Non-Government Segments

U.S. rulemaking studies adopt a range of approaches when categorising non-government participants. While Furlong and Kerwin (2005) and Golden (1998) agree on segments of business, government, and citizens, they differ in their approach to professional and trade associations. Furlong and Kerwin (2005) started with the collective associations, splitting into professional and trade, while Golden (1998) considers trade associations as a subset of the business category. Studies that approached segmentation based on information flows categorised industry collectively, regardless of whether industry members are a corporation, trade association or lobby group (Blayse & Manley 2004; Gann & Salter 1998).

These subtle differences in segmentation are important to this analysis. Industry associations may be described as a collective of companies, but those companies may demonstrate different decision
drivers when acting individually, such as seeking selective advantage for their company over competing companies in the same association. Golden demonstrates the importance of this distinction, finding that a lack of business influence is ‘in part because in a number of cases, business did not present a united front’ (1998, p. 262). Further, industry associations representing business interests may have differing regulatory drivers from professional associations, which represent their membership as a collection of individual practitioners. To capture these potentially differing drivers this research categorised industry either as companies acting independently of other groups, or those which form trade or industry associations.

Although previous studies identified trade unions as possible participants (Furlong 1997; Furlong & Kerwin 2005; Golden 1998) their analysis found little active involvement. Furlong and Kerwin (2005) received only one union response from a survey of 563 government affairs personnel including 10 trade unions. Golden (1998) found no comments submitted by unions to the three administrative agencies in her study. In Australia, trade unions did not respond to a Productivity Commission (2004) inquiry into building regulation which received 100 submissions from government, industry and the general public. In the time period of this research, trade unions did not submit a single change proposal and were not represented on the Building Codes Committee or Board\(^7\). Based on their absence from this rulemaking forum, trade unions are not specifically identified in the segmentation for this research. However, this exclusion is not to suggest that trade unions should not have a role in rulemaking, and their absence in both Australian and U.S. studies raises research questions which are beyond the scope of this work.

The final non-government participant to be included is Standards Australia. The role of standard setting organisations is not identified in prior U.S. rulemaking studied (Furlong 1997; Furlong & Kerwin 2005; Golden 1998) but their role in setting regulation is recognised (Breyer 1982). Standards Australia is a member of the Building Codes Committee (Australian Building Codes Board 2015b) recognised by the Australian Government as the Nation’s peak non-government standard setting body (Commonwealth of Australia 2013). Australian Standards are directly referenced in the building code (Australian Building Codes Board 2012c).

4.2.2.1 Resultant Segmentation

The actors and grouping established through literature review are represented in the diagram in Figure 4-2. This identifies the segments used for coding proponents of the 192 change proposals, and throughout the subsequent analysis of research questions in this study.

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\(^7\) Membership of the Building Codes Committee is explored in section 4.3.3.2, with membership balance analysed in section 4.5.2.2.
4.3 Research Question 1 –Encourage Participation.

The first research question evaluated how current administrative processes of the Australian Building Codes Board encourage participation.

*Research Question 1: How do participative processes in the Australian Building Codes Board’s administrative systems encourage participation by actors who will most affect the shape of regulatory outcomes?*

The analysis applied Croley’s (2008) proposition that administrative processes can deliver regulatory outcomes in the public’s interest subject to the condition that those processes encourage participation. In defining this condition, Croley (2008) distinguishes an administrative process which may provide opportunities to participate from one that specifically encourages participation by those who may be best suited to shaping regulation.

4.3.1 Approach to the Question

This question was approached by first establishing the points in the current administrative processes which permit participation. The analysis then identified the actors who actually participate at each of these points. These participants were divided into groups using the segmentation from section...
4.2. Participation rates for each segment were then compared to those within studies of rulemaking under the U.S Administrative Procedures Act (1946).

The analysis introduced informational aspects of the study, applying Croley’s (2008) requirement to measure participants who may ‘most affect regulatory outcomes’ to distinguish between expert and societal viewpoints. Linking the proposals submitted by type of participant group to building code outcomes evaluated how relevant each group was to the decision making process. Alignment between the technical committee’s capability and regulatory agenda was analysed by relating each participant’s technical expertise to the nature of submitted proposals.

4.3.2 Opportunities for Participation
The opportunities to participate in developing Australia’s building code are evaluated by analysis of the current administrative pathways. Details on the Proposal for Change process and administrative steps leading through to publication of each year’s building code are publicly available (Australian Building Codes Board 2011, 2012a, 2015b; Commonwealth of Australia 2012). A simplified process flow is developed from this information, which identifies key steps in the current process (Figure 4-3).

![Sequential Steps used in the Australian Building Codes Board's Proposal for Change Administrative Process](image)

*Source: Developed by the author from published information detailing building code processes (Australian Building Codes Board 2011, 2012a, 2015b; Commonwealth of Australia 2012).*

Each administrative step (Figure 4-3) represents a point of input, action, decision or output. The procedures and rules governing this process identify opportunities for actor participation⁸ (Table 4-3).

---

⁸ The Intergovernmental Agreement formally mandates roles for government representatives such as the ABCB Office, Commonwealth, State and Territory Administrations. These mandatory positions are not open to independent actors, and therefore not considered opportunities for participation in the administrative process.
<table>
<thead>
<tr>
<th>Step in Administrative Process (Figure 4-3)</th>
<th>Opportunities for participation</th>
<th>Type of participant input, action or decision point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal for Change.</td>
<td>Open to anyone.</td>
<td>Prepare and submit change proposals</td>
</tr>
<tr>
<td>Building Codes Committee (BCC) agenda.</td>
<td>Closed. Agenda is committee in confidence.</td>
<td>None. The agenda is set by ABCB Office.</td>
</tr>
<tr>
<td>Building Codes Committee (BCC) meeting.</td>
<td>Committee Membership by invitation from ABCB Office. Minutes and recommendations are committee in confidence.</td>
<td>Discussion of items on the agenda. Recommendations to ABCB Board.</td>
</tr>
<tr>
<td>Australian Building Codes formal Board meeting.</td>
<td>Five industry member positions selected by State and Territory Ministers. Other membership determined by the Intergovernmental Agreement.</td>
<td>Voting on BCC recommendations for inclusion in the public comment draft building code.</td>
</tr>
<tr>
<td>Drafting of building code public comment draft.</td>
<td>Translation from Board decisions to public comment draft is a closed process. The resultant draft is made available for public comment.</td>
<td>None. An administrative task by ABCB Office to formalise Board decisions and consolidate into a draft building code.</td>
</tr>
<tr>
<td>Public Comments received.</td>
<td>Open to anyone.</td>
<td>Submission of public comments against changes in draft building code.</td>
</tr>
<tr>
<td>Building Codes Committee (BCC) meeting.</td>
<td>Committee Membership by invite from ABCB Office. Minutes are committee in confidence.</td>
<td>Review of public comments and ABCB Office response to those comments. Recommendations to ABCB Board for inclusion in published building code.</td>
</tr>
<tr>
<td>Board draft of building code</td>
<td>Closed.</td>
<td>None. ABCB Office prepares draft for Board approval.</td>
</tr>
<tr>
<td>ABCB Board Meeting.</td>
<td>Position for five industry members, chosen by agreement from State and Territory Ministers.</td>
<td>Formal Voting on content of draft building code for publication.</td>
</tr>
<tr>
<td>Published Building Code.</td>
<td>Closed.</td>
<td>Following Board decision, no opportunities for participation in preparing final building code.</td>
</tr>
</tbody>
</table>

Table 4-3: Opportunities for Participation in the Australian Building Codes Board’s Administrative Processes

Table 4-3 identifies points through the administrative process which allow participation by those external to the Australian Building Codes Board. Initiation of a Proposal for Change and public comment are both open to any participants. Industry representatives may also participate through membership of the Building Codes Committee (Australian Building Codes Board 2015b).

While industry representatives may also participate on the formal Board of the Australian Building Codes Board, their participation is administratively complex and the rules for membership warrant detailed analysis. The composition of the Board, defined by the Intergovernmental Agreement (Commonwealth of Australia 2012), includes positions for a Chair, one Commonwealth Administration, eight State and Territory Administrations, and one local Government representative. Apart from these eleven mandatory government positions, there are five positions available for industry representatives, taking the Board to a potential maximum of 16 members. The Intergovernmental Agreement allows the Board to operate with a minimum of 10 members and the decision as to whether industry roles are filled is at the discretion of government members. Nomination of industry representatives is by consultation between the Commonwealth Minister, State/Territory Ministers, and the Australian Construction Industry Forum. These nominations are presented for majority vote by State and Territory Ministers. Each industry representative is limited to two consecutive terms, and may be removed at the sole discretion of the Commonwealth Minister at any time. As at January 2015, the board operated with four industry representatives (Australian Building Codes Board 2015a).

Where industry representatives do participate in Board meetings, their role is limited to each holding one vote on decisions concerning the content of the building code. Industry representatives are excluded from voting for election of the Chair and from nominating or selecting other industry representatives. Further, industry representatives are limited to less than fifty percent of the Board quorum at any time, ensuring their votes can never outnumber those of government representatives. The unilateral discretion held by the Commonwealth Minister, restrictions on quorum, and restrictive nomination process dilute any influence industry members may have on Board decisions. Although providing an opportunity for five invited industry representatives to voice their opinions, the restrictions on their participative voice suggests industry membership on the Australian Building Codes Board does not constitute a practical opportunity for open participation in this administrative process. This leaves three opportunities for open participation in setting Australia’s building code (Figure 4-4). These are initiation, industry participation on the Building Codes Committee and public comment.
Figure 4-4: Participation Points in the Australian Building Codes Board’s Proposal for Change Administrative Process
Source: Developed by the author from Australian Building Codes Board Information (Australian Building Codes Board 2011, 2012a, 2015b; Commonwealth of Australia 2012)

This identification of access points in the Australian Building Codes Board’s administrative process answers who is able to participate, but does not identify who actually does participate. Having established who can participate (Table 4-3) and identified the opportunities to participate (Figure 4-4), the analysis now focused on the measurement of actual participation.

4.3.3 Actual Participation
Actual participation was evaluated by measuring which actors actively participate at each of the three opportunities identified in the administrative processes of the Australian Building Codes Board (Figure 4-4).

4.3.3.1 Participation by Submitting a Proposal for Change
The first participation point in Figure 4-4 is the initiation of a change to the building code through the Proposal for Change process (Australian Building Codes Board 2012a). Of the 192 change proposals submitted during the period of this study, Table 4-4 aggregates the number of proposals submitted by each type of proponent using the segmentation in Figure 4-2.

The nine submissions from the general public represent 4.7% of the total. In analysing 474 public comments received against U.S. federal rules in Environmental Protection, National Highway and Traffic Safety, and Housing and Urban Development, Golden (1998) attributed 24 (5.06%) to individual citizens. She described this rate of participation as ‘a striking absence of citizen representation’ (Golden 1998, p. 255). Given the societal relevance of building regulation, its impact on safety and health (Productivity Commission 2004), effect on construction costs (Parliament of
Australia 2015), prominence in the economy (Australian Bureau of Statistics 2010), 4.7% of change proposals initiated by the general public indicates a similar underrepresentation to that found by Golden (1998).

<table>
<thead>
<tr>
<th>Proponent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Company</td>
<td>63</td>
<td>32.8</td>
</tr>
<tr>
<td>Industry/Professional Association</td>
<td>39</td>
<td>20.3</td>
</tr>
<tr>
<td>Council, Shire or City Government</td>
<td>31</td>
<td>16.1</td>
</tr>
<tr>
<td>ABCB Office</td>
<td>29</td>
<td>15.1</td>
</tr>
<tr>
<td>Other Government</td>
<td>15</td>
<td>7.8</td>
</tr>
<tr>
<td>General Public</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td>State Government Administration</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Standards Australia</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4-4: Count of Proposals for Change Submitted by Proponent Type

This analysis considered the possibility that low participation levels may be expected in an area of rulemaking which is predominantly technical, with a low level of public awareness. However, large subscriptions for access to the building code suggest this is not the case. In February 2015, the Building Code of Australia changed its distribution model from a subscription service, charging over $400 annually, to free web-based downloads. Between February and April 2015, 52,000 users registered for access and 36,000 users downloaded a copy (Savery 2015). Although this registered user base includes both industry practitioners and the general public, the disparity between 52,000 registered users, who are therefore aware of the building code, and only nine proposals submitted by the general public over four years supports the proposition of underrepresentation. There appears to be significant differences between awareness of Australia’s building code and motivation to participate in its development.

Aggregated submissions in Table 4-4 indicate that a number of actors who actively participate elsewhere in the administrative process also participate by initiating change proposals. Excluding proposals generated by the ABCB Office (29), Administrations (4), and proponents who are members of the Building Codes Committee9 (28), this leaves 131 proposals initiated by independent sources who do not already participate elsewhere in this administrative process. Analysis also reveals that

9 Analysed in detail in section 4.3.3.2
some proponents submitted multiple proposals over this four year study: 131 independent submissions were generated by 79 proponents. The six most prolific proponents generated 46 (35.1%) of the 131 independent proposals (Table 4-5), with a further twelve submitting two or more proposals, and 61 submitting single proposals over the period studied.

<table>
<thead>
<tr>
<th>Proponent Identifier</th>
<th>Proponent Type</th>
<th>Number of Proposals for Change Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponent #1</td>
<td>Council, Shire or City Government</td>
<td>22</td>
</tr>
<tr>
<td>Proponent #2</td>
<td>Independent Company</td>
<td>8</td>
</tr>
<tr>
<td>Proponent #3</td>
<td>Independent Company</td>
<td>4</td>
</tr>
<tr>
<td>Proponent #4</td>
<td>Independent Company</td>
<td>4</td>
</tr>
<tr>
<td>Proponent #5</td>
<td>Other Government</td>
<td>4</td>
</tr>
<tr>
<td>Proponent #6</td>
<td>Independent Company</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4-5: Proponent Types Submitting Multiple Proposals for Change

A summary of this analysis reveals that only 95 individual proponents initiated the 192 change proposals studied. Sixteen of these proponents have other mandated roles through the Australian Building Codes Board, or representation on convened committees, leaving 79 independent proponents over the four-year analysis period.

Returning to this specific research question, the Australian Building Codes Board provides a process where anyone can prepare and submit a change proposal, but this research finds relatively few choose to do so. This finding raises questions of why only 79 potential actors were motivated to initiate change and why only nine of these were from the general public. Does this inaction indicate satisfaction with current regulatory outcomes, or are other mechanisms dissuading participation?

4.3.3.2 Participation by Membership on the Building Codes Committee

The second participation opportunity (Figure 4-4) is through membership of the Building Codes Committee. The Intergovernmental Agreement requires the Australian Building Codes Board to convene a Building Codes Committee ‘to provide advice to the Board’ (Commonwealth of Australia 2012, p. 15) but allows significant discretion over its composition, size and operation. Membership is by invitation from the ABCB Office, provided to recognised bodies and organisations who may bring expertise in aspects of building. The current membership is published on the Board’s website (Australian Building Codes Board 2015b) and detailed in Table 4-6.
Rein’s (1983) establishes that where industry representatives are dissatisfied with access to their access to regulation, they will find other pathways to influence decisions. Furlong and Kerwin (2005) found a majority of their survey respondents rated participation in U.S. rulemaking as important, or more important than influence of government decision making by lobbying Congress or the White House, contributing campaign funds, litigating, or mobilising grass-roots support. Groups will turn to administrative rulemaking when other legislative pathways are blocked (Kamieniecki 2006a; Rinfret & Furlong 2012). Submitting change proposals may represent one alternative pathway for those wishing to influence government regulation in the building and construction domain.

There is an absence of repeated proposals from industry participants who are not otherwise represented on the Building Codes Committee. Analysis of the 131 independent change proposals (identified in section 4.3.3.1) found only two examples of repeated submissions by industry participants who are not also members of the Building Codes Committee. By contrast, 61 proposals were submitted by 16 members of the Building Codes Committee, with three industry associations alone responsible for generating 17 proposals. Therefore, although membership of the Building Codes Committee is at the discretion of the ABCB Office, the absence of industry generated proposals outside of this membership suggests industry interests may have adequate participation through this forum, which may indicate satisfaction with current processes and their regulatory outcomes.

<table>
<thead>
<tr>
<th>ABCB Office (Chair)</th>
<th>Commonwealth Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>State and Territory Government Administrations</td>
<td>Australian Institute of Building</td>
</tr>
<tr>
<td>Australasian Fire and Emergency Service Authorities Council</td>
<td>Australian Institute of Refrigeration, Air-conditioning and Heating</td>
</tr>
<tr>
<td>Australian Institute of Building Surveyors</td>
<td>Building Designers Association</td>
</tr>
<tr>
<td>Building Products Innovation Council</td>
<td>Consult Australia</td>
</tr>
<tr>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
<td>Engineers Australia</td>
</tr>
<tr>
<td>Fire Protection Association of Australia</td>
<td>Housing Industry Association</td>
</tr>
<tr>
<td>Master Builders Australia</td>
<td>Property Council of Australia</td>
</tr>
<tr>
<td>Royal Institute of Chartered Surveyors</td>
<td>Standards Australia</td>
</tr>
<tr>
<td>New Zealand Ministry of Business Innovation and Employment - Observer</td>
<td>Building Research New Zealand - Observer</td>
</tr>
</tbody>
</table>

Table 4-6: Membership of Building Codes Committee as at January 2015

Source: Australian Building Codes Board Website (Australian Building Codes Board 2015b)
4.3.3.3 Participation at the Public Comment Stage

The third participation opportunity is the submission of public comments. Proposed changes to the building code are compiled into a marked-up draft and published on the Australian Building Codes Board’s website. These drafts are publicly available and interested parties may review and comment on each proposed change, submitting these using a standard web-based template (Australian Building Codes Board 2015c).

The 192 change proposals analysed led to 80 changes published in the draft building code (Figure 4-5).

![Decision Tree from Building Codes Committee Recommendation to Public Comment Draft](image)

**Source:** Author

The Australian Building Codes Board received 71 public comments in response to these 80 draft changes. Forty-seven changes received no comments, with the remaining 33 receiving between one and five comments (Table 4-7).
| Number of Proposals receiving no comments | 47 |
| Number of Proposals receiving 1 comment | 15 |
| Number of Proposals receiving 2 comments | 6 |
| Number of Proposals receiving 3 comments | 6 |
| Number of Proposals receiving 4 comments | 4 |
| Number of Proposals receiving 5 comments | 2 |
| **Total** | **80** |

Table 4-7: Count of Comments Received Against Change Proposals

When compared to Golden (1998) and West’s (2004) measurement of public comments in U.S. rulemaking (Table 4-8), the level of submissions received indicates a low participation rate in this stage of building code development in Australia.

<table>
<thead>
<tr>
<th>Research Study</th>
<th>Number of changes</th>
<th>Number of comments</th>
<th>Comments per change</th>
<th>Median Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>This work</td>
<td>80</td>
<td>71</td>
<td>0.89</td>
<td>1</td>
</tr>
<tr>
<td>Golden (1998)</td>
<td>11</td>
<td>474</td>
<td>43</td>
<td>12</td>
</tr>
<tr>
<td>West (2004)</td>
<td>37</td>
<td>6375</td>
<td>172</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 4-8: Comparison of Public Comment Rates Between Studies

Source: Adapted from Golden (1998) and West (2004)

In summary, observed participation levels at the three identified points in this administrative process indicate underrepresentation by the general public and an absence of industry involvement outside of the Building Codes Committee. However, quantitatively aggregating instances of participation does not evaluate the effect and influence of those participants. It is recognised that small numbers of participants may exert significant influence over regulatory outcomes or conversely, large participation rates may do little to alter the decisions of the administrative agency. Therefore, the next part of this analysis extended the examination beyond participation rates, and considered the influence of actual participants; evaluating their relevance to those outcomes.

**4.3.4 Relevance to Regulatory Outcomes**

The influence of participants on the shape of regulatory outcomes may be related to their relevance in the decision making process. This was approached by first evaluating the relevance of those who participate by submitting change proposals, measured by establishing whether their submitted proposals successfully change the building code. The informational quality of a proponent’s submission was then established using measures developed in U.S. rulemaking research.
The second evaluation of relevance compared the capability profile of Building Codes Committee members to the nature of the technical decisions they face.

4.3.4.1 Proponent Success
Actors who submit change proposals are collectively termed ‘proponents’. A proponent’s ability to influence regulatory outcomes may be indicated by the preparedness of subsequent experts to accept or support their recommendations. In this analysis of building code development, the decisions of the Building Codes Committee were taken as a forum representing those experts.

The Building Codes Committee sometimes accepted a proponent’s solution as proposed. In other instances, the Committee acknowledged the problem identified by the proponent, but developed a different solution to that proposed. To identify this in the data, proposals were coded to distinguish where proponents only identified a problem from those which also proposed a solution. Where both problem and solution were proposed, the coding identified whether the Building Codes Committee accepted the solution, modified it in some way, or developed an alternative (Table 4-9). As this research question looks to establish the relevance of independent proponents, proposals generated by the ABCB Office are reported separately.

<table>
<thead>
<tr>
<th>Building Codes Committee Recommendation</th>
<th>Total Proposals</th>
<th>ABCB Office Proposals</th>
<th>Independent Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not supported</td>
<td>96</td>
<td>2</td>
<td>94</td>
</tr>
<tr>
<td>Proponent’s solution recommended</td>
<td>34</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>Proponent’s solution with modifications or edits recommended</td>
<td>17</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Alternate solution developed</td>
<td>24</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Proponent submitted a problem, without a solution. Committee prepared a solution</td>
<td>21</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>192</td>
<td>29</td>
<td>163</td>
</tr>
</tbody>
</table>

Table 4-9: Frequency of Building Code Committee Recommendations, Excluding ABCB Office Proposals

In 34 instances the proponent’s solution was recommended by the Building Codes Committee, and in a further 17, it was recommended with modification. This compares to 24 cases where the Committee developed an alternative method to address the identified problem, and 21 cases where no solution was proposed. A review of independent proposals, excluding the ABCB Office, presents a significantly different balance. Of 163 independent proposals, the proponents solution was
recommended in nine instances, with a further 15 recommended after some modification. By comparison the ABCB Office had 25 of 29 of its proposals recommended without change.

The first observation from Table 4-9 is that where the proponent initiating change is a recognised expert in building regulation, in this case the ABCB Office, a high percentage of proposals were recommended for regulatory change. The second observation is that changes proposed by independent proponents were accepted in only nine of 163 (5.5%) cases. In summary, expert proposals appear to have a high translation to regulatory change. In contrast, independent proposals rarely translate to regulation.

However the unexpected finding within this analysis are the 69 cases (42.3%) where the problem identified in the proponent’s proposal led to recommended changes to the building code, albeit with a regulatory solution developed by others. Experts in the administrative process acknowledged the problems identified by proponents, but disagreed with the proposed solution, developing an alternative of their own. These instances may be simple misinterpretations by the proponent or complex interpretations of technical requirements and regulatory drafting. For example a proposal finding inconsistency in cross referencing recommended the cross reference be included in multiple sections of the code. It actually transpired that the original cross reference cited by the proponent was the cause of the error, and it was deleted. In a complex example, a proposal from an industry association which held significant expertise in the specific technical domain recommended the removal of a clause which could be interpreted as understating design loads. However, those in the administrative process who are expert in regulatory drafting identified that removing the clause would lead to unintended consequences, and developed an alternative solution to the problem identified by adding clarification to the existing clauses.

This finding indicates that although non-expert participants may lack the capability to develop the regulatory solution, they may still be effective in identifying the regulatory problem. This suggests non-expert participants may provide information which is valuable to rulemaking agencies and subsequent regulatory development.

4.3.4.2 Proposal Size and Informational Quality

The informational quality of a proposal may alter its influence on the administrative process and may provide a measure of the proponent’s relevance in shaping regulatory outcomes. To evaluate the informational quality of submissions an approach measuring page count and technical evidence drawn from Yackee and Yackee’s (2006) research of U.S. rulemaking was applied. Those proponents who prepare larger, and arguably more thorough proposals, may be better suited to effect change.
Proposals that attach additional supporting documentation, such as scientific literature or technical reports, may indicate a higher informational value to decision makers (Yackee & Yackee 2006).

As building code change proposals use a common document format, font and layout, counting pages allowed a comparison of submission size. The average for all 192 proposals is 4.38 pages. Attachments and appendices supplied as supporting evidence to proposals average 3.2 pages, resulting in a total of 7.58 pages. This analysis of page lengths is applied to distinguish proposals that led to changes in the building code from those that were not successful (Table 4-10).

<table>
<thead>
<tr>
<th>Types of Proposal</th>
<th>Number in group</th>
<th>Average size (pages)</th>
<th>Average attachment size (pages)</th>
<th>Total size (pages)</th>
<th>Number of proposals with attachments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals that led to change in published building code</td>
<td>78</td>
<td>3.23</td>
<td>1.63</td>
<td>4.86</td>
<td>13</td>
</tr>
<tr>
<td>Proposals that did not change the building code</td>
<td>114</td>
<td>5.17</td>
<td>4.27</td>
<td>9.44</td>
<td>40</td>
</tr>
<tr>
<td>All Proposals in dataset</td>
<td>192</td>
<td>4.38</td>
<td>3.20</td>
<td>7.58</td>
<td>53</td>
</tr>
</tbody>
</table>

Table 4-10: Size of proposals and attachments, segmented by outcome

Longer proposals or those providing attachments with supporting information do not appear to correlate with their success changing the building code. Proposals affecting change show a smaller average page size than those not affecting change. Counting the number of attachments presents an even greater difference, with 13 of 78 successful proposals including attachments (16%), against 40 of 114 unsuccessful proposals (35%).

A further measure of informational quality may be provided where experts on the Building Codes Committee recommended solutions developed by the proponents themselves. In these cases, acceptance by experts may represent a higher information quality. To explore this correlation 34 proposals where the proponent’s solution was supported for direct inclusion in the building code and 17 where the solution was supported with edits (Table 4-9) are compared to averages for all 192 proposals (Table 4-11). This indicates that proposals recommended by the expert Committee have smaller average page sizes and fewer attachments.
<table>
<thead>
<tr>
<th>Types of Proposal</th>
<th>Number in group</th>
<th>Average size (pages)</th>
<th>Average attachment size (pages)</th>
<th>Total size (pages)</th>
<th>Number of proposals with attachments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals where proponent’s solution (34) or edited solution (17) was supported</td>
<td>51</td>
<td>4.06</td>
<td>1.78</td>
<td>5.84</td>
<td>11</td>
</tr>
<tr>
<td>All Proposals in dataset</td>
<td>192</td>
<td>4.38</td>
<td>3.20</td>
<td>7.58</td>
<td>53</td>
</tr>
</tbody>
</table>

Table 4-11: Size of proposals and attachments, segmented by solution acceptance

These observations in Australian practice are counter to the informational quality argument proposed by Yackee and Yackee (2006). This may be explained by an argument that the expertise of the proponent does not correlate with their effect on regulatory outcomes. Croley (2008) promotes this view, explaining that information which is useful to decision makers is useful regardless of its origin. Applying this finding to the administrative processes of the Australian Building Codes Board, proposals may not need to be long or technically complex to contain information which is valuable to the rulemaking agency.

An example is a short, one page proposal on fire safety. The non-technical nature of the proponent was evident in their response to a question on evidence by suggesting ‘the rest of the world has figured it out’ and justifying the proposed change on the grounds that ‘there will always be some clown who fancies himself as a fireman’. Although short, non-technical and not adequately responding to the questions in the proposal for change template (Australian Building Codes Board 2012e), the proposal led to a large review of the requirements for fire safety equipment in buildings.

A simple administrative process which allows participants to submit their views may provide information which is as valuable to decision makers as that generated by domain experts. This concept will be developed further through the discussion in Chapter Six.

4.3.4.3 Capability Profile of Building Codes Committee Membership

Another method to evaluate the relevance of participants to regulatory outcomes is to consider the capability balance across members of the Building Codes Committee. In this case, the analysis moves from the participants who submit change proposals to the industry participants selected as members of the Building Codes Committee. Reflecting on Croley’s (2008) question of whether those who participate are suited to shape regulatory outcomes, this part of the analysis asked if the composition of this committee is suited to the rulemaking decisions it faces and the technical scope
of submitted proposals. This question was answered by comparing the capability profile of the committee to the type of building regulations changed over the period of this study.

Each submitted change proposal identifies the volume, section and clauses of the building code it seeks to change (Australian Building Codes Board 2012e). Coding this information, the section of building code addressed by each proposal is aggregated and grouped based on the type of domain expertise (Table 4-12).

<table>
<thead>
<tr>
<th>Domain Expertise</th>
<th>Sections of Building Code</th>
<th>Count of Proposals</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Provisions</td>
<td>Vol 1 – Section A</td>
<td>14</td>
<td>7.3</td>
</tr>
<tr>
<td>Building Envelope/Structure</td>
<td>Structure, Vol 1 – Section B, Framing, Vol 2 – Section 3.4</td>
<td>16</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Site preparation, Vol 2 - Section 3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Footings, Vol 2 – Section 3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Masonry, Vol 2 – Section 3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cladding, Vol 2 – Section 3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glazing, Vol 2 – Section 3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire</td>
<td>Resistance, Vol 1 – Section C, Vol 2 - Section 3.7</td>
<td>20</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Bushfire, Vol 1 – Section G5, Vol 2 – Section 2.3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access and Egress</td>
<td>Vol 1 – Section D</td>
<td>24</td>
<td>12.5</td>
</tr>
<tr>
<td>Services and Equipment</td>
<td>Vol 1 – Section E</td>
<td>24</td>
<td>12.5</td>
</tr>
<tr>
<td>Health and Amenity</td>
<td>Vol 1 – Section F, Vol 2 – Section 3.8</td>
<td>21</td>
<td>10.9</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>Vol 1 – Section J, Vol 2 - Section 3.12</td>
<td>71</td>
<td>37.0</td>
</tr>
<tr>
<td>Ancillary, Maintenance</td>
<td>Vol 1 – Section G, Vol 1 – Section I</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-12: Count of Domain Expertise Identified in Each Change Proposal

The current membership of this Building Codes Committee (Australian Building Codes Board 2015b) and a qualitative profile of each member organisation’s technical and engineering capability\(^{10}\) are also tabulated against these categories of domain expertise (Table 4-13).

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\(^{10}\) This characterising of the technical and engineering capability of each participating member is not supported by survey or by direct questioning of the Building Codes Committee. The analysis is drawn from this researcher’s personal knowledge following a six year membership of this Committee and his association with its members.
<table>
<thead>
<tr>
<th>Building Codes Committee Membership</th>
<th>Capability Profile (Domain Expertise)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Requirements</td>
</tr>
<tr>
<td>ABCB Office (Chair)</td>
<td>1</td>
</tr>
<tr>
<td>Commonwealth Administration</td>
<td>1</td>
</tr>
<tr>
<td>State and Territory Administrations</td>
<td>8</td>
</tr>
<tr>
<td>Australasian Fire and Emergency Service Authorities Council</td>
<td></td>
</tr>
<tr>
<td>Australian Institute of Building</td>
<td>1 1</td>
</tr>
<tr>
<td>Australian Institute of Building Surveyors</td>
<td>1 1</td>
</tr>
<tr>
<td>Australian Institute of Refrigeration, Air-conditioning and Heating</td>
<td></td>
</tr>
<tr>
<td>Building Designers Association</td>
<td>1 1</td>
</tr>
<tr>
<td>Building Products Innovation Council</td>
<td></td>
</tr>
<tr>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
<td>1 1</td>
</tr>
<tr>
<td>Consult Australia</td>
<td>1 1</td>
</tr>
<tr>
<td>Engineers Australia</td>
<td>1 1 1 1 1 1 1 1 1 1 1</td>
</tr>
<tr>
<td>Fire Protection Association Australia</td>
<td></td>
</tr>
<tr>
<td>Housing Industry Association</td>
<td>1 1</td>
</tr>
<tr>
<td>Master Builders Australia</td>
<td>1 1</td>
</tr>
<tr>
<td>Property Council of Australia</td>
<td>1 1</td>
</tr>
<tr>
<td>Royal Institute of Chartered Surveyors</td>
<td></td>
</tr>
<tr>
<td>Standards Australia</td>
<td>1 1</td>
</tr>
<tr>
<td>Totals Attendee CapabilityNote 1</td>
<td>21 12 5 9 10 8 8 8</td>
</tr>
<tr>
<td>Percentage of Totals</td>
<td>25.9% 14.8% 6.2% 11.1% 12.3% 9.9% 9.9% 9.9%</td>
</tr>
</tbody>
</table>

Table 4-13: Composition of Building Codes Committee and Categorisation of Technical Capability

Source: Membership list from ABCB Website (Australian Building Codes Board 2015b)

Note 1 – This total excludes two observer positions held by the New Zealand Ministry of Business Innovation and Employment and Building Research New Zealand.
The frequency of domain expertise identified in proposals (Table 4-12) is compared to the capability across current Building Codes Committee membership (Table 4-13) to provide an indication of the relevance of this forum to its rulemaking agenda (Table 4-14).

<table>
<thead>
<tr>
<th>Domain Expertise/Building Codes Committee Capability</th>
<th>General</th>
<th>Building Envelope</th>
<th>Fire, bushfire</th>
<th>Access &amp; Egress</th>
<th>Services</th>
<th>Health</th>
<th>Energy</th>
<th>Ancillary, Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability on Building Codes Committee (from Table 4-13)</td>
<td>25.93%</td>
<td>14.81%</td>
<td>6.17%</td>
<td>11.11%</td>
<td>12.35%</td>
<td>9.88%</td>
<td>9.88%</td>
<td>9.88%</td>
</tr>
<tr>
<td>Count of provisions identified in proposals (from Table 4-12)</td>
<td>7.3%</td>
<td>8.3%</td>
<td>10.4%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>10.9%</td>
<td>37.0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Table 4-14: Comparison of Building Code Committee capability and provision types in change proposals.

This comparison indicates a dominance of capability around general building provisions and building envelope provisions, which may be expected given that a general understanding of building and the building code is a prerequisite for membership of this committee. Energy efficiency is the least represented capability. Fire and bushfires is also an area where there is relatively low capability.

While acknowledging the granular nature of this categorisation and limitations identified through the analysis, a number of findings may be drawn from this comparison. Overall the composition of members indicates relevance to the technical nature of rulemaking in the building domain. Although an under-representation of energy efficiency and fire capability is identified, this does not suggest a total absence of capability, with membership appearing to provide coverage on the scope of these technical provisions. The current rules governing this committee provide the ABCB Office discretion to change its composition in response to changing technology and regulatory drivers. The differences identified in Table 4-14 suggest the Australian Building Codes Board could be more dynamic in exercising its discretion over committee membership in order to respond to changes of direction in technology and government policy.

4.3.5 Summary of Observations and Discussion
This research question asked whether the administrative processes of the Australian Building Codes Board encourage participation by actors who will most affect the shape of regulatory outcomes. It was approached by measuring ‘who can show up’, evaluating current processes to identify
opportunities for participation, then establishing ‘who does show up’, measuring actual participation through the stages of building code development.

The review identified three points for participation in the administrative process; submission of a change proposal to initiate change, membership of the Building Codes Committee and public comment against draft building codes. Potential participants at each of the three points were identified and segmented into groups. While characterisation of non-government segments drew on previous U.S. rulemaking studies, segmentation of government participants introduced a new approach, grouping them based on whether they were formally delegated legislative power in the administrative process rather than their jurisdictional or geographic responsibility.

An absence of proposals by the general public was observed at the initiation stage, with public participation predominantly in response to a single regulatory issue rather than any organised citizen group activity. An absence of public participation was also found in the number of public comments submitted in response to the proposed building code when compared to similar processes in U.S. rulemaking. While these low levels may suggest satisfaction with current process, alternative explanations include lack of awareness, apathy, or a system that discourages participation. These alternatives are further explored throughout this chapter.

Measuring the success of proposals presented an unexpected finding. Although only nine of 163 change proposals led to the proponent’s recommended change being adopted, 69 of the problems identified by proponents resulted in changes in the building code. In these instances, the proponent’s original solution was replaced with one developed by experts later in the administrative process. This observation suggests the information in submitted proposals is valuable in the rulemaking process, adding to understanding of the informational aspects of participation and providing evidence of why public participation should be encouraged.

The current administrative process requires proponents who wish to submit change proposals to demonstrate expertise in drafting building code clauses. This requirement may be dissuading non-experts from participating, and explain the low rate of general public participation observed in this analysis. The observation that experts in this administrative system accept and action problems identified by non-experts suggests that providing opportunities for proponents to identifying regulatory problems, without navigating an administrative process that requires domain expertise, may provide valuable information to this rulemaking agency. This aligns with Yackee’s (2014) findings of information capacity and Golden’s (1998) recommendation that administrative agencies play a more active role providing affected groups of the opportunities to participate and comment.
Specifically answering the research question, this study’s observations indicate that the open access to current administrative processes provide opportunities for participation by those who will most affect the shape of regulatory outcomes. But, these open processes do not necessarily translate into participation by actors able to provide broad information for decision makers. Segmenting industry, government, and expert practitioners from participation by the general public finds those who are not expert in building, and thereby unable to develop effective, technically sound regulatory solutions, are less effective in changing regulatory outcomes. This reduced efficacy may discourage their participation, and thereby reduce the expression of societal expectations in the administrative processes of the Australian Building Codes Board. Therefore, when evaluating Croleys (2008) condition to encourage participation, it is necessary to distinguish between expert and non-expert participants. The latter, while not necessarily suited to drafting detailed regulation, may still be able to identify problems in practice and offer information which is valuable to rulemaking.

4.4 Research Question 2 – Correspondence and Coherence

Research question one found low participation by the general public, and suggested those not expert in building may be less effective in changing the building code. Research question two evaluated the effect of participation in more detail, applying tests proposed by Tetlock (2005) in his work developing standards for judging judgements. A correspondence test evaluated how well the rulemaking agency’s beliefs correspond with the community it regulates, and a coherence test evaluated whether decision making beliefs are consistent, and change in response to changing evidence or new information?

Research Question 2: Do the participative processes provide evidence of correspondence and coherence?

The analysis identified instances when participants at each of the participation points identified in section 4.3.2 altered the view of those within the Australian Building Codes Board’s administrative office. It then measured whether those altered views translated to changes in regulatory outcomes.

4.4.1 Approach to the Question

This analysis applied a similar method to Golden’s (1998) measurement of differences between Notices of Proposed Rule Making (NOPR) and Final Rules (FR) published by U.S. administrative agencies to indicate the influence of participants. In taking this approach, she argues ‘it can be assumed with some confidence that the interest group comments submitted during the notice and comment period were the catalyst for these changes’ (Golden 1998, p. 259).

Each change proposal submitted to the Australian Building Codes Board is reviewed by its administrative office (ABCB Office), with a copy of each proposal, summary of key issues, and the
ABCB Office’s recommendation included on the agenda for the next Building Codes Committee meeting (Figure 4-3). The minutes of those meetings provide evidence of where the ABCB Office views have changed, and the content of the draft building code establishes whether these changes were supported by the Australian Building Codes Board and published in the code. Collectively, these documents provide evidence of when the ABCB Office’s initial views are changed and the discussions recorded in the meeting minutes provide insight to the information on which those change of views was based. Following Golden’s (1998) approach, this research analyses participation as the catalyst for those views changing.

### 4.4.2 Analysis and Observations

The ABCB Office’s recommendations against each proposal are coded into categories of those supporting the proposal, those not supporting the proposal and those making no recommendations. The Building Code Committee’s recommendations against each proposal were initially coded as support or otherwise. In accordance with this inductive research approach, these are now extended to include outcomes where the decision was referred to a working group for further analysis or the Committee recommended non-regulatory pathways, such as education processes. Each proposal is then traced through the public comment process, establishing whether it resulted in changes to the published building code.

#### 4.4.2.1 Identification of Changed Views

The ABCB Office recommended that 86 of 192 proposals be supported. Of these, 68 were also supported by the Building Codes Committee for inclusion in the draft Building Code, with three recommended for inclusion in the Guide to the Building Code (Table 4-15).

<table>
<thead>
<tr>
<th>ABCB Office Recommendation</th>
<th>Building Codes Committee Recommendation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Place in draft Building Code</td>
<td>Education Process</td>
</tr>
<tr>
<td>Supported</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Not Supported</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>None Proposed</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4-15: Cross tabulation of ABCB Office and Building Codes Committee Recommendations
This left 15 cases where the ABCB Office view was changed following participation from the Building Codes Committee. Of the 99 proposals not supported by the ABCB Office, five were placed in the Public Comment Draft building code and six placed in the Guide to the Building Code, providing a further 11 cases where the ABCB Office’s view was changed from its initial recommendation.

The data in Table 4-15 is graphically represented in a decision tree structure (Figure 4-6) and identifies 26 cases where the Building Codes Committee and ABCB Office’s recommendation did not agree, plus seven cases where the ABCB Office made no recommendation. A further seven cases are identified where the recommendations of the ABCB Office and Building Codes Committee align, but changed through later administrative processes of public comment or Board review. In aggregation, this analysis established 40 instances from the 192 proposals (20.8%) where the ABCB Office position was totally or partially influenced by participants, or they elected to leave the decision to participants.

![Decision Diagram of ABCB Office Supported Cases](source: Author)
Figure 4-6 also shows that ABCB Office views change in both directions, supporting previously unsupported proposals and vice versa. This observation differs from Croleys findings that interest groups do not get what they want from agencies, but merely less of what they do not want (Crolley 2008, p. 133), and provides an indication that this administrative system may be responsive to participant inputs.

4.4.3 Tetlock’s Measures of Political Judgement

This part of the analysis evaluated cases where the views of industry participants or general public do not align with those of the Australian Building Codes Board (Figure 4-6). When experiential and analytical concepts of risk do not align, ‘risk as politics’ pervades the decision process (Slovic et al. 2004, p. 1). Therefore, applying tests which evaluate political judgement aligns with instances where views misalign and may provide new insight to rulemaking.

Tetlock analyses political decision making to identify ‘standards for judging judgement’ (2005, p. xvi). Approaching his research from the perspective that ‘what experts think matters far less than how they think’ (Tetlock 2005, p. 2), he developed two judgement tests, termed coherence and correspondence. Coherence relates to ‘how experts think’, questioning whether their beliefs are ‘internally consistent’ and ‘do they update those beliefs in response to evidence’ (Tetlock 2005, p. 7)? Correspondence relates to ‘what experts think’, and is defined as ‘how well do their private beliefs map onto the publicly observable world (Tetlock 2005, p. 7).

4.4.3.1 Coherence

Participation in rulemaking will add little value should the views of participants be ignored (Yackee 2014). Yackee’s (2014) research into participant voice suggests a participant’s activity and their perception of efficacy in the process are related. Coherence tested this efficacy, measuring the consistency of process, and how views change in response to changing evidence.

Coherence is a complex measurement. Logical coherence evaluates the impacts of participant involvement, and dynamic coherence evaluates the effectiveness of involvement. Logical coherence is static, looking at the way systems flow in a consistent manner. This flow was analysed as part of the first research question in this study which found that current administrative processes do provide consistent opportunity for actors to participate (Figure 4-4).

Dynamic coherence uses a process perspective, reviewing belief systems at points in time prior to, and subsequent to, the discovery of outcomes or new evidence. When applied to rulemaking, Tetlock’s (2005) dynamic coherence measures how views change in response to participants bringing
new information to the administrative process. This was analysed by reviewing instances when the ABCB Office changed its views (Figure 4-6).

Of 11 cases where the ABCB Office recommended not to support a proposal and the Building Codes Committee recommended otherwise, 10 were included in the subsequent Public Comment Draft. Of 15 cases where the ABCB Office supported a proposal and the Building Codes Committee recommended it not be supported, 2 were included in Public Comment Draft. Collectively, of 26 instances where views of the ABCB Office and Building Codes Committee did not align, the public draft of the building code reflected the recommendations of the Building Codes Committee in 23 (88%) cases. This observation evidences an administrative agency whose beliefs appear to change when additional information, counter to their initial view, is received. The high percentage of changed views is indicative of a process with dynamic coherence.

### 4.4.3.2 Correspondence

Correspondence describes how well the views and beliefs of the Australian Building Codes Board align with the community they are regulating (Tetlock 2005). Accordingly, the correspondence between administrative decision makers and the views of those in society who bear the consequence of their decisions is an important measure.

When participating interests and the administrative agency disagree, or when the views of two participating actors do not align ‘some must win and some must lose’ (Kerwin 2003, p. 202). Therefore, when views of the ABCB Office and Building Codes Committee do not align, it can be argued that one will win and one will lose. However, measuring winners and losers, or right and wrong from society’s perspective is not an objective of this research, nor an outcome expected from the methodology of formative evaluation used for this thesis. To overcome this limitation, Tetlock’s (2005) measure of correspondence was analysed by tracing through the entire administrative process of public comment and Board review, establishing whether instances when views of the ABCB Office and Building Codes Committee did not align resulted in changes to the published building code. This provided a measure of whether the changed views corresponded to the later stages of public comment and policy review.

Instances where views do not agree are identified from Figure 4-6, with 15 proposals where Building Codes Committee changed the ABCB Office view from support to not-support. Of these, two proposals reverted to the original ABCB Office recommendation through later public comment and Australian Building Codes Board processes. Figure 4-6 also shows 11 cases where Building Codes Committee changed the ABCB Office view from not-support to support, with 10 included in the Public Comment Draft and 9 subsequently published in the Building Code of Australia. Collectively,
this totals 22 of 26 cases (84.6%) where the Building Codes Committee changed the initial recommendation of the ABCB Office, and that changed recommendation was subsequently accepted through later stages in the administrative process. This high level of translation between changed views and published building code suggests correspondence between the participatory effect of the Building Codes Committee and later administrative process.

4.4.4 Summary of Observations and Discussion
This research question extended analysis beyond the identification of participants to explore the effects of their participation. Implementing regulation requires reconciliation of three conflicting imperatives: legal, rationally defensible, and political feasibility (Rein 1983). In decisions where all parties share a common view, those conflicts are minimal and the effect of participation will be less apparent, thereby reducing inferences that can be drawn from case study. This evaluation targeted instances where views of external participants and the administrative agency did not align, which were seen as more relevant to understanding potentially conflicting regulatory imperatives. Tetlock’s (2005) tests of coherence and correspondence were applied to 40 change proposals meeting this criteria.

The administrative process demonstrated coherence, with initial views of the administrative agency changing in response to new information supplied by the Building Codes Committee. External participation did not simply dilute proposed changes, and the Australian Building Codes Board’s views were changed whether their initial position was to support or not support proposals.

Correspondence identified how differing views between the ABCB Office and Building Codes Committee correspond to eventual publication of building code changes. With 22 of 26 cases identified successfully progressing through public comment phases and onto publication, a level of correspondence is indicated in the administrative process.

This analysis found an administrative agency that appears to alter its view in response to participation. This preparedness to change is counter to the findings of Golden (1998), where she observed a tendency for U.S. agencies to favour public comments that supported the proposed rule over those that were critical of the change. These differences may be explained by the stage of rulemaking analysed, with this research evaluating participation in the early stages of rule development and Golden’s (1998) analysis made later in the process, after the agency had invested resources in development of the proposed rule.

Although Tetlock’s (2005) tests measure the preparedness of the administrative agency to change its views, they do not indicate whether those changes deliver regulatory outcomes that are closer to, or
further from, the public’s interest. The potential for participatory processes to be dominated by participants who drive outcomes away from public interest and towards delivery of regulatory rents, were evaluated in the next research question.

4.5 Research Question 3 - Interest Group Dominance.

Interest theories of regulation are differentiated by which interests (public, group or private) capture the resultant regulatory outcomes (Baldwin, Cave & Lodge 2012). The theories describe a landscape of competing views, asking ‘which actor dominates in the relationship amongst those who shape and implement governmental policies’ (Rein 1983, p. 114). Interest theories extend the scope of this analysis from the evaluation of participating actors as individual entities to consider the influence from collected interests. Interest groups represent a collection of interests that participate in government rulemaking to extend their own interests and seek outcomes which benefit them (Furlong 1997).

The potential for imbalance across interests (Croley 1998; Rinfret & Cook 2014b; West 2005) and question of parity between interest groups (Furlong 1997; Golden 1998) are common themes in U.S. rulemaking literature. A lack of parity is explained by financial and informational advantages allowing some groups a higher frequency of participation (West 2009) where rulemaking may be influenced by ‘regulated parties, with little to no counter-pressure from the public interest’ (Wagner, Barnes & Peters 2011, p. 30).

Excluding interest groups from participating in processes setting government policy can lead to those groups attempting to modify outcomes through later implementation phases (Rein 1983). Evidence of this influence on implementation reported in U.S. rulemaking studies (Furlong 1997; Furlong & Kerwin 2005; Golden 1998) with findings that interest groups may attempt to drive administrative processes towards outcomes suited to their own interests. This section evaluated whether this influence is evident in setting Australia’s building code.

*Research Question 3: Are current processes dominated by any interest group or organisation?*

The analysis identified whether interest group influence dominates administrative process and whether this might result in a bias in regulatory outcomes.

4.5.1 Approach to the Question

Interest group dominance was evaluated by analysis of the balance between current participants, measurement of bias in regulatory outcomes towards participant groups, and evaluation of the influence of the general public. The analysis extended beyond the U.S. literature’s predominant
focus on ‘notice and comment’ stages of rulemaking (Rinfret & Cook 2013) and measured participation balance across all stages of the administrative process from initiation of change through to published regulation. Opportunities for participation were measured at each stage, membership of formal committees and Boards was reviewed, and the balance between government, industry and general public within each sub-group established.

4.5.2 Participation Balance in Current Administrative Processes

McKay and Yackee’s measurement of U.S. interest group dominance hypothesises that ‘the squeaky wheel gets the grease’ (2007, p. 336), finding those groups more active in administrative process have a greater effect on regulatory outcomes. Applying their finding to this analysis, actors with increased opportunities of participation will have a greater role in outcomes and may therefore have greater potential to dominate. This mechanism to dominate the process is also recognised by Croley’s speculation that ‘special-interest domination seems more or less likely depending on the procedural opportunities available to other interests’ (1998, p. 167).

Participation opportunities for different actors identified in Figure 4-2 were evaluated by analysing the rules used by the Australian Building Codes Board to provide access. The end-to-end administrative process were evaluated and then membership of the Building Codes Committee and Board considered in closer detail.

4.5.2.1 Opportunities for Participation across all Processes

Analysis of the administrative process used by the Australian Building Codes Board in Figure 4-4 identified ten steps, three of which provided opportunities for participation by independent actors. The process is extended to also include participation points which are only accessible to Commonwealth, State and Territory government participants. The inclusion of both independent and government actors identified twelve discrete points where participants may influence the content of the building code (Figure 4-7).

![Sequential Australian Building Codes Board Administrative Process](image)

**Figure 4-7: Sequential Australian Building Codes Board Administrative Process**

Tabulating these points against the types of actors identified in Figure 4-2 results in a matrix of participation opportunities through each stage of the process (Table 4-16).

Summing opportunities for each participant type shows a degree of balance between participants from the administrative agency and independent actors. The ABCB Office and Board along with Commonwealth and State Administrations recognised in the Intergovernmental Agreement (Commonwealth of Australia 2012) have 26 opportunities to participate in the process. Independent organisations and parts of government not recognised in the Agreement have 16 opportunities to participate. However, although independent actors participate at a number of points through this administrative process, some of these opportunities to participate are in committees whose membership is at the discretion of the Australian Building Codes Board, and therefore not open to all participants.
The Intergovernmental Agreement (Commonwealth of Australia 2012) sets rules for membership of the Australian Building Codes Board and provides the administrative agency discretion in the constitution of the Building Codes Committee. The rules provide government participants control over independent representation on these fora which may offset the potential for industry or interest groups to dominate. This control however raises a possibility that the dominating influence in this administrative process may be the Australian Building Codes Board itself. To explore this, the
mechanisms for membership of the Building Codes Committee and Board were evaluated in greater detail.

4.5.2.2 Opportunities for Participation by Membership on the Building Codes Committee
The Intergovernmental Agreement requires establishment of an expert Building Codes Committee to provide advice to the Board. Composition and operation of this committee is at the discretion of the Board and ABCB Office with the restriction that it is advisory, and ‘cannot make decisions that vary the National Construction Code’ (Commonwealth of Australia 2012, p. 15). As at April 2015 this committee included 27 members (Australian Building Codes Board 2015b).

The current Building Codes Committee membership is segmented by the type of participant based on Figure 4-2 and the following characteristics:

- Commonwealth Administration – Defined in the Intergovernmental Agreement as ‘Commonwealth department or agency that has administrative responsibility for the subject matter of this Agreement’ (Commonwealth of Australia 2012, p. 4);
- State and Territory Administration – Defined in the Intergovernmental Agreement as ‘the relevant department, statutory body, division or agency that has administrative responsibility for the subject matter of this agreement in a State or Territory’ (Commonwealth of Australia 2012, p. 4);
- Other Government – Agencies and organisations of government not specifically identified in the Intergovernmental Agreement;
- Professional Bodies – Organisations representing building professions, usually with acknowledged qualifications required for membership. This category is used to describe associations of industry practitioners; and
- Industry Associations – Organisations representing interests of an industry group, differentiated from Professional Bodies in that this group tend to represent companies and firms rather than individual professional practitioners⑪.

Aggregating current membership against each characteristic provides an indication of the balance across participant types (Table 4-17).

⑪ Although segmentation in Figure 4-2 combined professional bodies and industry associations into a single category, additional details available for each participant on the Building Codes Committee allows these two groups to be identified separately in this section of the analysis.
<table>
<thead>
<tr>
<th>Member Organisation</th>
<th>Commonwealth Administration</th>
<th>State/Territory Administration</th>
<th>Other Government</th>
<th>Professional Bodies</th>
<th>Industry Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Building Codes Board Administration Office (Chair)</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Government (Commonwealth)</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All State and Territory Governments (8 positions, one for each State and Territory)</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australasian Fire and Emergency Service Authorities Council</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Institute of Building</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Institute of Building Surveyors</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Institute of Refrigeration, Air-conditioning and Heating</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Designers Association</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Products Innovation Council</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consult Australia</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineers Australia</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Protection Association of Australia</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Industry Association</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master Builders Australia</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Council of Australia</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Royal Institute of Chartered Surveyors</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standards Australia&lt;sup&gt;Note 1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealand Ministry of Business Innovation and Employment – Observer&lt;sup&gt;Note 2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Research New Zealand – Observer&lt;sup&gt;Note 2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for each Type</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Note 1 – Standards Australia does not align with any group and have not been classified.
Note 2 – New Zealand representatives attend as observers, and have been excluded.

Table 4-17: Analysis of Building Code Committee Members by Type

Source: Intergovernmental Agreement (Commonwealth of Australia 2012)

Building Codes Committee membership demonstrates a balance between government and independent actors with twelve from government administrations and twelve from industry and professional bodies. Non-government membership is also evenly balanced between professional bodies and industry associations. This numerical balance between participants suggests a
committee composition where, without formation of coalitions, it would be difficult for one view to dominate, particularly where that view is rent seeking and not aligned with general consensus.

4.5.2.3 Opportunities for Participation on the Australian Building Codes Board

Unlike the discretion provided to the Australian Building Codes Board to set membership and operation of the Building Codes Committee, the structure of the Australian Building Codes Board itself is prescriptive. Nine of twenty-three sections in the Intergovernmental Agreement (Commonwealth of Australia 2012) are dedicated to defining the Board’s composition and governance. Board members, whether from government or industry, are selected through formal voting processes, with input from the relevant Ministers in each State, Territory and the Commonwealth. These prescriptive requirements are summarised and compared to the equivalent requirements for membership and operation of the Building Codes Committee (Table 4-18).

Material differences between the requirements governing government and industry Board members are evident. The size of the Board and mandatory participation of Commonwealth, State and Territory delegates leaves the five potential industry seats as discretionary, and a quorum can be provided without the presence of industry or external representatives. The Chair is nominated and voted by relevant Ministers, with industry members excluded from the process. Selection of industry members is at the discretion of the represented Ministers, with sitting industry members not permitted to nominate potential candidates nor participate in votes selecting new members. Finally, quorum rules require that industry members always constitute less than half those present at any meeting, thereby providing collective government representatives the right of veto in any vote. Therefore, while industry membership is permitted on the Board, governance rules appear to dilute their material effect on regulatory outcomes.
<table>
<thead>
<tr>
<th>Participation Requirements</th>
<th>Australian Building Codes Board</th>
<th>Building Codes Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Between 10 and 16 members including Chair.</td>
<td>No minimum or maximum size specified.</td>
</tr>
<tr>
<td>Composition</td>
<td>The head of each Commonwealth, State and Territory Administration, as the Department or Agency with responsibility for the subject matter of the Building Code.</td>
<td>Determined by the Board. Board may also establish other Committees from time to time as required.</td>
</tr>
<tr>
<td></td>
<td>Representative of the Australian Local Government Organisation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up to five industry representatives at least one of whom must have plumbing experience.</td>
<td></td>
</tr>
<tr>
<td>Appointment of Chair</td>
<td>Nominated by Commonwealth Minister. State/Territory Ministers may nominate an alternative candidate. Voted by Commonwealth, State, and Territory Ministers. (Note – Chair is not chosen by the Board nor selected from existing Board members).</td>
<td>Not specified. Currently Chaired by the General Manager of the ABCB Office.</td>
</tr>
<tr>
<td>Selection of Industry Representatives</td>
<td>Nominated by Commonwealth Minister, with other nominations from Australian Construction Industry Forum (ACIF) and State/Territory Ministers. Selected by votes from the State/Territory Ministers.</td>
<td>Composition not specified. Determined by ABCB Office and Board.</td>
</tr>
<tr>
<td>Term of Membership</td>
<td>Two consecutive terms up to five years each.</td>
<td>No terms are specified.</td>
</tr>
<tr>
<td>Meeting Schedule</td>
<td>Minimum of twice in each financial year</td>
<td>Schedules are not specified.</td>
</tr>
<tr>
<td>Quorum</td>
<td>Ten members, with requirement that more than 50% must represent government administrations.</td>
<td>Quorum requirement are not specified.</td>
</tr>
<tr>
<td>Limitations</td>
<td>Operate within the Financial Management and Accountability Act (FMA) and in compliance with Council of Australian Governments (COAG) principles.</td>
<td>Cannot make decisions that vary the National Construction Code (all decisions to change the Code are made by the Board).</td>
</tr>
</tbody>
</table>

Table 4-18: Participation Requirements for the Australian Building Codes Board and Building Codes Committee

Source: Adapted from Intergovernmental Agreement (Commonwealth of Australia 2012).

Outside the absence of public representation (identified in section 4.3.3 and discussed further in section 4.5.4) current administrative processes and formal committees appear to achieve a representational balance between industry and government participants. But although industry has
defined roles through the administrative process, current rules restrict control of published building code content to government members of the Board.

This retained control is demonstrated by decisions on the provisions for residential smoke alarms. Subsequent to the usual administrative process (Figure 4-7), the Regulation Impact Statement and economic modelling of regulatory options recommended retaining current provisions for the installation of smoke alarms in Australian buildings (Australian Building Codes Board 2012f). Notwithstanding this recommendation, Intergovernmental Agreement (Commonwealth of Australia 2012) rules allowed the Australian Building Codes Board to adopt a higher cost option, increasing the stringency of regulation. This control over participation and resultant decisions offsets potential mechanisms that may otherwise provide industry and external participants the opportunity to dominate administrative process.

4.5.3 Potential Bias in Regulatory Outcomes
While analysing the membership of committees may identify balance between those who participate, it does not indicate whether participant influence on regulatory outcomes is balanced. This was analysed by evaluating how participant’s in the administrative process influence regulatory stringency, then measuring the success each type of participant has in changing the building code.

4.5.3.1 Direction of Change in Regulatory Stringency
The requirement that building regulation should not drive aspirational levels of functionality or performance (Inter Jurisdictional Regulatory Collaboration Committee 2010) is reflected in the Intergovernmental Agreement’s (Commonwealth of Australia 2012) objective to deliver minimum codes and standards. However, Australia has experienced a trend towards increased stringency of regulation, and the Australian Building Codes Board is accused of setting levels above the minimum required (Banks 2006). The analysis used this tension around stringency change and the differing drivers between participating actors as an indicator of balance between participant types.

The evaluation of each change proposal identified whether proponents called for increased, decreased or no change in the stringency of regulatory outcomes. Increases in stringency would set a higher requirement than current levels, such as adding new provisions for previously unregulated areas or increasing the requirements of existing clauses. Adding a requirement to interconnect multiple smoke alarms in a dwelling is an example of a new provision, while extending the energy

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12 The effect of participation on the objective for minimum regulatory stringency is evaluated further in Section 5.3.
efficiency requirements from five to six star is an example of increasing existing provisions. Reduced
stringency would lower regulated requirements. Proposals of an editorial nature, clarifications or
error corrections are considered to effect no change in stringency. Findings over the four years are
aggregated by proponent type (Table 4-19).

<table>
<thead>
<tr>
<th>Proponent Type</th>
<th>Change in Stringency Proposed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decreased</td>
<td>Increased</td>
</tr>
<tr>
<td>Government Agencies defined in the Intergovernmental Agreement</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>(ABCB Office and State Administrations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Government (Councils, Shires and other departments)</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Independent Company</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Industry Associations</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>General Public (Independent Person)</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Standards Australia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>30</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

Table 4-19: Stringency Change Proposed, Segmented by Proponent Type

Differences in stringency are observed between government agencies defined in the
Intergovernmental Agreement and those from other areas of government. Comparing a ratio
between the stringency changes proposed by different types of participant can highlight this. The
ratio between proposals calling for increased stringency and those calling for decreased stringency is
1:5 for proposals generated by Intergovernmental Agreement participants and 5:1 for those
generated by other government areas. For change proposals from industry participants, the ratio
between calls for increased and decreased stringency was 2: 1 for those submitted by independent
companies and 1:2 for industry association submissions. Proposals from the general public, while a
small sample, show a trend to increased stringency.

The ratios established from Table 4-19 suggest different types of proponent tend to drive stringency
in a particular direction. Of interest to the question of whether any group dominates current
administrative processes is the observation that where stringency changes proposed by one
participant type skew in one direction, an inverse is seen in a parallel group of participants. Of the
proposals analysed, there is no indication that any participant type is successful in driving stringency
of regulatory outcomes in a given direction.
4.5.3.2 Participant Success

The second method used to analyse potential bias in outcomes measured how many of each participant’s proposals were successful in changing the building code. Each ‘successful’ proposal is stated as a percentage of the total proposals submitted over the four year study (Figure 4-8).

![Percentage of Proposals Translating to Publication, by Proponent Type](image)

Figure 4-8: Percentage of Proposals Translating to Publication, by Proponent Type (Grey line shows average for non-ABCB Office proponents)

The outlier in Figure 4-8 shows 90% translation to publication for proposals generated by the ABCB Office. This high rate would naturally be explained by its role administering the content of the Building Code, with 26 of 29 of its proposals administrative or editorial in nature. For all other proposals, the balance between the success rate of each proponent type indicates that none overly influence outcomes. Additionally, no indication of bias towards industry or government is observed.

Outside of the inevitable influence exercised by the Australian Building Codes Board itself, neither proposed stringency changes nor success in changing regulatory outcomes suggests any bias to particular proponent types nor domination by a single group.

4.5.4 Participation by the General Public

The final analysis of interest group dominance considered participation by the general public.

Section 4.3.3.1 of this chapter found that only 4.7% of proposals were generated by the general public, suggesting the public does not dominate this stage of rulemaking. Section 4.3.3.3 found low
participation rates during public comment phases, with 80 draft changes to the building code receiving only 24 comments from bodies not related to the Australian Building Codes Board.

The influence of these public comments on regulatory outcomes were evaluated using methodology from Golden’s (1998) study on U.S rulemaking. Influence was measured by evaluating the effect of public comments on changes between the draft and the published building code (Table 4-20).

<table>
<thead>
<tr>
<th>Changes in public comment draft</th>
<th>Final Publication of Building Code</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Included</td>
<td>Not Included</td>
</tr>
<tr>
<td>Comments Received</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>No Comments Received</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>Not included in Public Comment Draft</td>
<td>3</td>
<td>109</td>
</tr>
<tr>
<td>Totals</td>
<td>78</td>
<td>114</td>
</tr>
</tbody>
</table>

Table 4-20: Public Comments Received and Differences between the Draft and Published Building Code

Of 33 draft changes that received comments, three did not proceed to the published building code. Of 47 draft changes where no comments were received, two did not proceed to publication. This represents a small number of changes in response to feedback from public comments. Further, similarity in the level of change whether comments were received or not, indicates little influence from participation at this stage of the administrative process.

4.5.5 Summary of Observations and Discussion

The potential for interest group dominance was evaluated by analysing participation balance, bias in outcomes and influence of public comments.

Review of the administrative rules and processes found opportunities for participant access across all processes to be balanced between government and independent participants. The size, diversity, and balance between participant types leads to a conclusion that domination by a single participant type or interest group view is not evident in current administrative processes.

Using change in stringency as a measure, no types of participant were found to dominate regulatory outcomes. Although differences between segments are identified, the balanced ratios between participant types shows that each is offset by a competing position from others active in the administrative process. The effect on outcomes, defined by the success of the proposals translating to changes in the building code, showed a balance across participant types.
The general public only submits a small proportion of total change proposals. Additionally, it is found that the public comment stage of the administrative process does not significantly affect outcomes, with the resultant published codes showing few changes from the draft. While the observed absence of public participation leads to a finding that the public are not expected to dominate current process, this is based on actual participation measured over four years. U.S. research identifies that groups more active in the process achieve greater changes to rulemaking outcomes (McKay & Yackee 2007). Therefore while not finding evidence of groups dominating current process, the researcher recognises that if particular interest groups or the general public were to increase their rates of participation, there is a potential for their views to dominate process.

Specifically answering this research question, the analysis did not find evidence of domination by any external interest group or organisation. An overriding factor is an administrative process that limits external participants to the role of information provider and advisor, with the Building Minister’s Forum and government members on the Australian Building Codes Board setting the content of the published building code and ensuring its alignment to government policy. This restriction of decision making power to government members raises an argument that the Australian Building Codes Board, and those government administrations with responsibility for building, themselves dominate this rulemaking process. This dominant role of government is explored by Golden, whose research positions U.S. administrative agencies as arbitrators in the process, where it is ultimately ‘agency officials, not interest groups, who make the final judgement on the content of the rule’ (Golden 1998, p. 264).

Golden’s (1998) findings are relevant to this research question. When the administrative agency acts as the arbiter or umpire between external participants it can regulate the influence those participants may have over rulemaking outcomes. But what if the mechanisms used by this administrative agency to stop external participants from dominating the rulemaking process renders those participants ineffective at enacting regulatory change? Will this lack of voice influence the decision to participate? This question is answered by Yackee’s (2014) findings that participation may be discouraged if participants perceive their input as ineffective. How participants perceive their voice and whether they perceive the administrative agency hears their voice was explored in the next research question, evaluating the processes used to reach agreement amongst participants.

4.6 Research Question 4 – Agreement amongst Participants

Participation in rulemaking may be influenced by an actor’s perception of whether their voice is heard by the administrative agency (Yackee 2014). The administrative processes used by the
Australian Building Codes Board may affect this perception of voice and therefore influence participation.

The process of implementing regulation is described as ‘a declaration of government preferences, mediated by a number of actors, who create a circular process characterised by reciprocal power relations and negotiations’ (Rein 1983, p. 118). Rein (1983) argues that actors in this process must consider three imperatives: legal, rational-bureaucratic, and consensual. This research question evaluates Rein’s consensual imperative and the requirement for regulators ‘to do what can help establish agreement among contending influential parties who have a stake in the outcome’ (Rein 1983, p. 118).

Research Question 4: Do current administrative processes achieve agreement amongst participants?

The extent to which the administrative processes of the Australian Building Codes Board achieve this consensual requirement may provide an indication of how actors perceive their voice.

4.6.1 Approach to the Question

The analysis was applied from a perspective that should actors perceive the administrative processes do not achieve agreement, they may be frustrated and seek to influence outcomes by other pathways. This draws on Rein’s (1983) conclusion that ‘when the demand for action is high and the effects of influence on the results of that action are obscured, the general result is not a sense of protection against arbitrary behaviours, but primarily a widespread sense of frustration’ (Rein 1983, p. 123). Influencing rulemaking outcomes is an identified priority for both business and non-business interests (Furlong 1997; Kerwin 2003), and participants may counter their frustration by increased involvement in other stages of the rulemaking or regulatory process (Kamieniecki 2006b; Rinfret & Cook 2013).

Drawing on the findings from this prior rulemaking literature, it is posited that if the administrative processes of the Australian Building Codes Board achieve consensual agreement amongst participants, actors will not be frustrated and therefore not actively seek a voice through other rulemaking fora. Conversely, a system not reaching agreement would lead to frustrated participants, resulting in increased lobbying and increased participation through other regulatory pathways.

This approach was applied by comparing participation levels at differing stages of this administrative process against the levels in other rulemaking studies. Participation levels were then compared to submission levels for other participative government processes outside of rulemaking. These invited
public participation and covered domains in building and construction along with other topics of public relevance.

4.6.2 Absence of Participation
Section 4.3.3 of this research established actual levels of proponents submitting proposals to initiate changes in Australia’s building code. It found the disparity between 79 proponent submissions and 52,000 registered building code users may indicate a low level of participation. As only nine of these 79 proponents were private citizens, a significant absence of general public participation was also concluded.

Measurement of actual participation rates through the ‘notice and comment’ process is used in U.S. studies to explore influence in rulemaking (Golden 1998; West 2004). The similarity between this U.S. process and the public comment process for the Australian building code was established in Section 3.4.4.3. Analysis of comments submitted in response to draft changes in the Australian building codes found 71 individual comments received, against 80 draft changes. This rate, less than one comment per change, is significantly lower than U.S. studies finding 43 (Golden 1998) and 172 (West 2004) comments per change respectively. As U.S. interest groups identify rulemaking an important form of lobbying, with 81% of groups providing comments during this process (Furlong & Kerwin 2005), the rates observed in Australia could be seen as very low.

This absence of actual participation could be taken to suggest participating actors may be satisfied with their access to current administrative process and the mechanisms by which it achieves consensual regulatory outcomes. However a counter argument could suggest that low participation levels may be due to actors being disengaged from the process, with their absence caused by disinterest rather than evidencing satisfaction. The researcher recognises that a qualitative investigation of participants, while outside the scope of this thesis, constitutes potential future research which would provide further insight to Australian rulemaking.

4.6.3 Participation in Other Regulatory Reform Opportunities
Frustration with current processes may be indicated by participants looking to achieve influence of government’s views by participating in other pathways. Kamieniecki (2006a) identified this in U.S. environmental regulation, where interest groups turned to executive government to bypass a policy gridlock in Congress. To evaluate this in relation to Australia, participation rates measured in building code processes were compared to participation in another opportunity to influence building regulation through a public inquiry operated by the Australian Government.

From a range of Australian Productivity Commission inquiries between the years 2000 and 2015 (Productivity Commission 2015), a 2004 report into building regulation reform (Productivity
Commission 2004) was selected for analysis based on its relevance to regulation and building, as well as its wide public reach. In conducting this inquiry, the Productivity Commission actively sought written submissions from interested parties. These included invitations sent directly to potential participants active in building and construction along with open advertisements in major newspapers. The inquiry received 100 submissions in total, 55 in response to the initial terms of reference and 45 in response to publication of the draft report (Productivity Commission 2004). Submissions13 were tabulated based on the segmentation developed in Section 4.2 of this analysis (Table 4-21).

<table>
<thead>
<tr>
<th>Analysis Segment</th>
<th>Number of Participants Making Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCB Office</td>
<td>1</td>
</tr>
<tr>
<td>State Government Administrations</td>
<td>11</td>
</tr>
<tr>
<td>Council, Shire or City Government</td>
<td>6</td>
</tr>
<tr>
<td>Other Government</td>
<td>9</td>
</tr>
<tr>
<td>Industry/Professional Association</td>
<td>26</td>
</tr>
<tr>
<td>Independent Company</td>
<td>6</td>
</tr>
<tr>
<td>General Public</td>
<td>7</td>
</tr>
<tr>
<td>Standards Australia</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
</tr>
</tbody>
</table>

Table 4-21: Segmentation of Submissions to Inquiry into Reform of Building Regulation

Of the 67 submitting organisations, 28 were identified as active in other processes of the Australian Building Codes Board through the four years of this study. Seventeen of 27 government submissions and 9 of 26 industry submissions were from organisations with direct membership on the Australian Building Codes Board or the Building Codes Committee. Outside of those already active in building code development, ten government organisations, 17 industry associations, six independent companies and seven independent persons made submissions to the inquiry. While the absolute numbers are small, these rates of participation by each actor type indicate a similar participation pattern to the proponents of change proposals measured in this research (Table 4-4). The inquiry’s use of major newspaper advertisements to solicit submissions and raise awareness, along with the

13 In tabulating this list, multiple submissions from the same the same organisation through the consultation process were excluded, counting each participant only once.
low rate of participation by actors not already involved in the process of Australia’s building regulation, indicates there is not a segment of the broader community who sought to influence building regulation through this pathway, suggesting an absence of frustration with access to building code development.

Participation rates in the 2004 Inquiry are compared to other Productivity Commission Inquiries to establish whether they are typical for this type of public inquiry or peculiar to building regulation. Table 4-22 summarises submissions received for public inquiries related to the area of building and construction in Australia.

The inquiry specifically into building regulation (Productivity Commission 2004) received 100 submissions, which appears at the lower end of submission rates and less than a third of submissions to inquiries into historic buildings and first home ownership.

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Number of Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation of Historic and Heritage Places</td>
<td>July 2006</td>
<td>418</td>
</tr>
<tr>
<td>Consumer product Safety</td>
<td>Feb 2006</td>
<td>340</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>Oct 2005</td>
<td>155</td>
</tr>
<tr>
<td>Reform of Building Regulation</td>
<td>Dec 2004</td>
<td>100</td>
</tr>
<tr>
<td>First Home Ownership</td>
<td>June 2004</td>
<td>340</td>
</tr>
<tr>
<td>Improving Future Performance of Buildings</td>
<td>Dec 1999</td>
<td>27</td>
</tr>
</tbody>
</table>

Table 4-22: Submission to Selected Productivity Commission Inquiries Related to Building

Source: Adapted from submission information on Productivity Commission website (Productivity Commission 2015)

To provide a comparison outside of building and construction, the number of submissions received by Productivity Commission inquiries on other topic areas are also measured (Table 4-23).

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Number of Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childcare and Early Childhood Learning</td>
<td>Feb 2015</td>
<td>908</td>
</tr>
<tr>
<td>Disability Care and Support</td>
<td>Aug 2011</td>
<td>1062</td>
</tr>
<tr>
<td>Gambling</td>
<td>June 2010</td>
<td>422</td>
</tr>
<tr>
<td>Caring for Older Australians</td>
<td>August 2011</td>
<td>925</td>
</tr>
</tbody>
</table>

Table 4-23: Submission to Selected Productivity Commission Inquiries not related to Building

Source: Adapted from submission information on Productivity Commission website (Productivity Commission 2015)

Submission rates to non-building topic areas appear higher than those to building related inquiries (Table 4-22) and higher than the inquiry specifically addressing building regulation (Productivity Commission 2004).
Commission 2004). On the basis that these Inquiries were undertaken by the same government department, in the same jurisdiction and using similar methodology, it is concluded that building regulation exhibits low participation levels.

The 2004 Productivity Commission inquiry (Productivity Commission 2004) provided an alternative opportunity for external participants to influence building regulation in Australia. As those frustrated with current processes are expected to increase involvement in alternative opportunities to influence regulation (Kamieniecki 2006b; Rinfret & Cook 2013), one explanation for the low level of submissions received by this inquiry may be satisfaction with participative opportunities provided through current processes of the Australian Building Codes Board. However, the researcher acknowledges that an understanding of the motivation of individual actors cannot be assumed, and sets an agenda for future research with a qualitative study of actors in the Australian building sector.

4.6.4 Summary of Observations and Discussion
The administrative processes of Australian Building Codes Board have been studied to ascertain whether they achieve agreement amongst participants. The analysis was approached from the perspective that participants would be frustrated by a system that fails to reach agreement. As participation in the rule making process is an important method for interest groups to influence regulation (Furlong & Kerwin 2005), the low participation levels observed may indicate an industry and general public neither frustrated with access to, nor dissatisfied by outcomes from, the administrative process. This finding is supported by measuring similar rates of participation in an inquiry into building regulation (Productivity Commission 2004) operated by an Australian administrative agency operating independently of the Australian Building Codes Board.

Based on the absence of actors using alternative pathways to influence regulation, this analysis suggests this administrative system may be achieving agreement amongst those who participate, and therefore answers this research question in the affirmative. However it is recognised that an absence of frustration does not positively indicate agreement amongst participants and this question would benefit from future qualitative evaluation. Recognising this limitation in the method used in this research, this finding is considered in light of findings from research question one, which distinguished between those who can participate, those who actively participate, and the broader group of actors who may be affected the rulemaking outcomes. In building regulation, this latter group includes all those in society who interact with the built environment, arguably the majority of Australia’s population. The technical nature of the proposal template (Australian Building Codes Board 2012e) and science based decision fora may dissuade participation by those not expert in building regulation. Therefore, the suggested finding of agreement amongst those who currently
participate is not interpreted as evidence of an administrative system which necessarily reaches agreement amongst all actors who may be affected by the regulatory outcomes.

4.7 Summary of Chapter Four

This chapter evaluated the research questions related to theoretical aspects of rulemaking developed in Chapter One. These established whether current administrative processes encourage participation, whether participants were heard, and if their participation altered the views of the administrative agency. The research then evaluated whether rulemaking could be dominated by specific interests and how agreement is achieved. In summary, the analysis found an open system that provides opportunities for participation in setting Australia’s building regulation. It also found a system that was responsive, with evidence of the Australian Building Codes Board changing its views to reflect participant input. Administrative mechanisms in current processes appear to minimise opportunities for interests to dominate while achieving a level of agreement amongst participants.

While analysis of the four research questions returned generally positive findings, some shortcomings in current practice were observed. The administrative processes were found to allow open participation and encourage participation by industry and government representatives who offer expertise suited to shaping regulatory outcomes. However, there was an absence of representation by the general public and participants who are unable to offer specific domain expertise. Current processes do not appear to provide decision makers with the views of those who may be affected by the rulemaking outcomes and information which represents societal expectations of the built environment.

The analysis revealed a system which demonstrates attributes of correspondence and coherence, with evidence that the views of the Australian Building Codes Board change in response to the advice of experts on the Building Codes Committee. However, of 163 independent proposals analysed, only nine directly resulted in changes to the content of the building code. This is a relatively low rate when compared to acceptance of 27 from 29 proposals developed by ABCB Office experts. Similarly public comments received in response to the draft building code had little impact on regulatory outcomes, with only five proposed changes revised during this open review stage.

Although the current processes minimise domination by interest groups or those seeking regulatory rent, it appears that this is achieved by placing government members and the administrative agency as the ultimate arbiter of outcomes. The administrative processes provide opportunities for government participants and decision makers to source information from experts, and analysis of past decisions finds evidence of the Australian Building Codes Board actively seeking this input.
However, where the accepted position in regulatory literature is for the advice of experts to be balanced against societal views, the only reference in the Intergovernmental Agreement (Commonwealth of Australia 2012) to societal needs and expectations is in relation to an objective to develop outcomes that accord with the strategic priorities established by the relevant Ministers.

The analyses through this chapter arrived at a finding of an administrative system which includes participative processes. These processes are open to all participant types and encourage participation by actors who offer technical capability which is suited to shaping regulatory outcomes. But this finding is countered by findings which suggest the development of the Australian building code may currently be dominated by domain experts. This raises questions of who is absent from these processes and how does that absence affect the balance of information available to decision makers. In relation to the aim of this research, these findings support the proposition that administrative processes influence an actor’s decision to participate in rulemaking, but raise a question regarding which aspects of those processes lead to the observed imbalance in participation. This question will be explored through discussion in Chapter Six.
Chapter 5. Analysis of Intergovernmental Agreement Objectives

5.1 Chapter Outline

The analysis and discussion components of this thesis are covered across chapters four, five and six. Chapter Four has addressed the research questions related to theoretical perspectives of participation and consultation in administrative rulemaking. Chapter Five moves onto the practical implementation of participative processes in the context of Australian building code development. It contributes to this thesis by exploring aspects of current practices which may influence participants and contribute to the imbalance identified in the previous chapter.

The Intergovernmental Agreement (Commonwealth of Australia 2012) which sets the rules and processes used in development of Australia’s building code defines a series of objectives for the Australian Building Codes Board. This chapter evaluates the alignment between objectives selected for their relevance to participation and the current administrative practices employed by the Australian Building Codes Board.

5.1.1 Structure of this Chapter

This chapter is structured to mirror the research questions on practical implementation from Chapter One. Each section will address a single question relating to a specific policy objective of the Australian Building Codes Board. An explanation of the analytical approach and reporting of results follows the discussion of each question. Each section closes with a summary of the observations and findings in answer to the research question.

5.2 Research Question 5 – Level of Analysis Applied

The Australian Building Codes Board has an objective to ensure that when determining ‘the level of the requirements, there is a rigorously tested rationale for regulation’ (Commonwealth of Australia 2012). This research question analysed whether current administrative practices provide the forum and canvass the information necessary to allow rigorous testing?

Research Question 5: To what level does current practice provide analysis to inform regulatory decisions, and meet the objective to provide a ‘rigorously tested rationale for regulation’?

The analysis evaluated whether this administrative agency responds to the submitted change proposals based on its internally held views or actively drew on its participative processes to seek information to inform decisions.
5.2.1 Approach to the Question
This question was approached by reviewing recommendations made by the administrative office of the Australian Building Codes Board (ABCB Office) and Building Codes Committee in response to the 192 change proposals in this study. It identifies whether the administrative processes used to review the submitted change proposals applied a simple yes or no decision to the proponent’s recommendations, or actively sought input to inform the regulatory decision.

Rulemaking decisions which are referred to other actors for analysis or to seek additional information may indicate an administrative process applying rigorous testing. Case study analysis was applied to extend understanding of the drivers which led to those referrals.

The final part of this analysis focused on regulatory outcomes, evaluating cases when the proponent’s recommendations are changed or amended during the administrative process. The level to which administrative activities involve decision makers in the details of a submitted change proposals may indicate the level of rigour applied by the process.

5.2.2 Processes Applied Beyond Yes or No Decisions
The analysis of change proposals in Chapter Four (Figure 4-5) aggregated whether each change was included in the building code or rejected. In accordance with the inductive research approach these yes or no categories were extended to include new information identified in the data, arriving at six categories detailed in Table 5-1. This extended coding identifies 26 proposals where administrative pathways beyond yes or no decisions were applied.

<table>
<thead>
<tr>
<th>Building Code Committee Recommendation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include change in the draft building code</td>
<td>73</td>
<td>38.0</td>
</tr>
<tr>
<td>Generate educational (informative) material to inform market and practitioners</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Place in the Guide to the building code (informative)</td>
<td>10</td>
<td>5.2</td>
</tr>
<tr>
<td>Do not include in draft building code (rejected)</td>
<td>92</td>
<td>47.9</td>
</tr>
<tr>
<td>Refer for further analysis or initiate research project</td>
<td>15</td>
<td>7.8</td>
</tr>
<tr>
<td>Proposal withdrawn by proponent</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 5-1: Frequency of Building Code Committee Recommendations
The Building Code Committee recommendations include non-normative\(^{14}\) outcomes, where informative details are placed in the Guide to the building code. This Guide is a companion to the building code, and while not referenced in regulation, provides building practitioners with clarification or examples of complex requirements (Australian Building Codes Board 2012b). Responding to change proposals by adding informative text to the Guide may indicate the administrative process applies a level of analysis beyond yes or no decisions.

The analysis also found 15 proposals referred to other parties. Minutes of the Building Code Committee meetings indicate that these referrals were to other expert bodies for further analysis, or referral back to the ABCB Office to initiate further formal research to investigate the issue. These referrals may indicate instances where this administrative system is applying more rigorous analysis and therefore relevant to this research question.

5.2.3 Drivers of the Outcome to Refer Decisions

The 15 proposals which were referred to other parties were analysed against factors of proponent expertise and stringency to identify characteristics which may have influenced the decision to refer the proposals.

Based on Yackee’s (2014) research on participant information capacity, the analysis in Section 4.3.4.1 suggested that change proposals which identify a problem in the current building code and also propose a solution to the identified problem may indicate a higher level of expertise by the proponent. No clear differences are observed when this measure of proponent expertise was applied to the 15 proposals. Eight identify only a problem and seven propose both problem and solution.

Whether stringency change has an influence on the decisions to refer proposals is established by categorising proposals as those proposing a change of stringency in the building code, and those of an administrative nature such as correction of errors and editorial improvements (originally reported in Table 4-19). Of 15 instances where proposals are referred to other parties, eleven proposed a change in stringency. While this indicates some tendency for proposals calling for material, rather than administrative, changes to be referred, the small difference does not provide conclusive evidence.

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\(^{14}\) Normative and informative are terms applied in regulatory and standardisation documents. Normative requirements are adopted through legislation and become mandatory. Informative details are provided for commentary or as additional guidance to practitioners (Standards Australia 2013)
5.2.4 Case Analysis of Referred Proposals

A case analysis was applied to extend understanding of factors that may have prompted the administrative process to refer proposals to other actors. The design of this case analysis posed two questions. The first asked why proposals that appear straightforward required referral. The second asked why some instances where proponents did not develop a solution to the identified problem were referred, and some were not.

5.2.4.1 Case Study of Straightforward Referrals

Where regulatory decisions are complex at either technical or policy levels, decision makers may be expected to call on broader information and advice to assist their deliberations. Instances where seemingly straightforward decisions are referred may provide insight into the factors which influenced rule makers to call for broader consultation. Case analysis is applied to these cases.

The cases were selected from instances where proponents developed solutions to identified problems, where those solutions were of an administrative or editorial nature, and where they did not propose changes in the stringency of regulatory outcomes. This identified two change proposals from the sample of 15 which met this criteria, designated RQ5-A-1 and RQ5-A-2 for analysis.

Proposal RQ5-A-1 identified conflicting requirements for appliance installations between clauses in the building code and parallel clauses in a related Australian Standard. As the Australian Standard is referenced in the building code, it left building practitioners unable to meet the conflicting requirements of both documents. The meeting minutes show support for the proposal, but rather than accepting the proponent’s solution, the Building Codes Committee recommended a review of clauses in both the building code and Australian standard. The proposal was referred to the ABCB Office to provide a technical review of these clauses.

The meeting minutes indicate the Building Codes Committee reasoned this was a low risk change, and referred review and drafting of clauses to the ABCB Office out of session, rather than undertake the task during the meeting. Therefore, RQ5-A-1 indicates a non-critical problem whose solution required levels of consideration and analysis beyond the time constraints of a Building Codes Committee meeting. The referral appears to be for expediency.

Proposal RQ5-A-2 concerned calculation factors in the building code which are used to verify a building’s performance. These factors differed from equivalent factors in other national and international reference documents widely accepted in Australia. It recommended replacing current calculation factors with values cited from the industry accepted reference documents. The Building Codes Committee meeting minutes showed support for the change proposal, but disagreement over
whether the entire industry document should be referenced, or only the specific calculation factors cited.

The proposal was referred to the ABCB Office to seek clarification from other parties, including intellectual property owners of the proposed reference documents, as to the impacts of referencing them in the building code. It was noted that referring this decision would allow the outcome to be included in the next revision of the building code, where waiting for the next Building Codes Committee meeting to revisit the decision would miss publication deadlines and perpetuate the inconsistency for a further twelve months.

The question in this case study asked why two apparently straight-forward cases were referred to broader consultation. Neither case was referred to provide an opportunity for additional analysis, but each required consideration and clarification beyond the time available in the committee meeting. The commonality between the two appears to be a referral to allow efficiency of process. Referral allowed additional time to draft clauses without requiring they be presented to future Building Codes Committee meetings and thereby delaying the correction of inconsistencies in the building code. Both cases suggest an administrative process with the flexibility to apply actions appropriate to the nature of the proposed change. Analysis of these cases finds the referrals were made to allow expedient technical drafting rather than seeking new information, and therefore indicate a drive for efficiency rather than suggesting rigorous analysis.

5.2.4.2 Referrals to Develop Regulatory Solutions

Analysis in Chapter Four identified 21 proposals where proponents stated a problem with the current building code but did not develop a solution. In instances where these proposals led to changes in the building code, the solution was drafted later in the administrative process. Of these, some proposals were referred to external parties for additional analysis, while in others, solutions were developed by the Building Codes Committee. These proposals were qualitatively analysed to compare differences between the two groups.

In four of the 192 proposals studied, the regulatory solution was not included in the proposal, but developed during the rulemaking process. These are designated RQ5-B-1 through RQ5-B-4. For proposals RQ5-B-1 and RQ5-B-2 solutions were developed by the ABCB Office or Building Codes Committee, then included in the Public Comment Draft. Proposals RQ5-B-3 and RQ5-B-4 were each referred to a project group for further analysis and development. A summary of each follows.

Proposal RQ5-B-1 argued that methods for calculating building performance should include provision for fittings and equipment that may be added following building completion. The ABCB
Office recommended the proposal not be supported on the basis that a construction code should not regulate additions to buildings post completion. The Building Codes Committee supported this recommendation, but called for an explanatory note to reduce similar erroneous assumptions by other practitioners. The drafting of this note was delegated to the ABCB Office. The referral of the decision appears to be driven by expediency in the committee process.

Proposal RQ5-B-2 identified an inconsistency between parallel clauses in building code volumes where buildings in Volume 2 used a differing calculation method to those in Volume 1. The ABCB Office and Building Codes Committee supported the proposal. Drafting of changes was delegated to the ABCB Office to provide additional time for the changes and their implications to be considered.

Proposals RQ5-B-3 and RQ5-B-4, while submitted by separate proponents, addressed a common section and common problem in the building code. Building Codes Committee meeting minutes show that both proposals were discussed as a single item, and recorded as a single minute and outcome. Each proposal was complex and presented a number of sub-proposals calling for changes covering product testing, reference standards, terminology and product specification. The agenda of the Building Codes Committee meeting show an ABCB Office recommendation that one item from each proposal be supported in principle, with the remaining proposals rejected.

The meeting minutes show the Building Codes Committee discussed aspects of proposals RQ5-B-3 and RQ5-B-4 which fell outside the recommendations of the ABCB Office, thereby introducing new information and issues beyond those raised by proponents. The meeting Chair agreed that these wider issues should be considered before reaching a decision. The meeting decided to add the issue to the Australian Building Codes Board’s formal work program. This decision indicates an administrative process that can both evaluate when a greater level of analysis is required and provide pathways for participants to call for that greater level of evaluation.

Analysis of these four proposals indicates the decision to refer to a broader project group appears to be applied when rulemaking extends beyond the scope and information covered in the initiating change proposal. The decisions referred from the Building Codes Committee to the ABCB Office appear to be limited to technical drafting, which is outside the time constraints of committee process, but not requiring rigorous analysis or review.

Combining observations on referrals of both straightforward and complex cases suggests the administrative processes of the Australian Building Codes Board can provide pathways and discretion for the ABCB Office to call for additional analysis where it deems necessary. This discretion allows actions to be delegated to other actors for the purpose of meeting efficiency.
More complex, multifaceted problems can be referred to the formal Australian Building Codes Board work program. Therefore current practice indicates that the administrative process may apply analysis which is more rigorous than decisions made by ABCB Office staff alone. However, this additional analysis is not mandated, and the motivation for when it is sought is not included in the records of meetings available in this study.

5.2.5 Information Sought from Referral
Rulemaking literature indicates that an administrative agency should balance how the views of experts and societal expectations inform its decisions (Rayner & Cantor 1987; Slovic et al. 2004; Sundlof 2000). In the context of this research question, it is argued that meeting the objective for a ‘rigorously tested rationale for regulation’ would sometimes require proposals to be referred for societal or policy input, not just expert drafting. To analyse this aspect, the 15 proposals referred by the Building Codes Committee (identified in Table 5-1) are reviewed to ascertain the party or groups to whom the decision was referred (Table 5-2).

<table>
<thead>
<tr>
<th>Proposal Identifier</th>
<th>Referral Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
<tr>
<td>2</td>
<td>A working group established from Building Code Committee members</td>
</tr>
<tr>
<td>3</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
<tr>
<td>4</td>
<td>ABCB Project team to prepare reference document</td>
</tr>
<tr>
<td>5</td>
<td>ABCB Office to review clause details</td>
</tr>
<tr>
<td>6</td>
<td>Return to proponent (industry association) for rewrite of proposal</td>
</tr>
<tr>
<td>7</td>
<td>Standards Australia technical committee</td>
</tr>
<tr>
<td>8</td>
<td>Refer proponent to premises standards</td>
</tr>
<tr>
<td>9</td>
<td>ABCB Board for policy decision</td>
</tr>
<tr>
<td>10</td>
<td>ABCB Office to review clause details</td>
</tr>
<tr>
<td>11</td>
<td>Refer proponent’s scientific evidence for peer review</td>
</tr>
<tr>
<td>12</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
<tr>
<td>13</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
<tr>
<td>14</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
<tr>
<td>15</td>
<td>ABCB Project team responsible for this provision</td>
</tr>
</tbody>
</table>

Table 5-2: Pathway for Decisions Referred by Building Codes Committee
Thirteen of the proposals in Table 5-2 are referred to experts in building or experts in drafting building regulation. One is referred back to the proponent’s industry association, also an expert in their subject area. One proposal is passed without recommendation to the Australian Building Codes Board, with the meeting minutes noting the policy nature of the decision.

An absence of referrals to non-technical or non-expert fora is observed. This suggests the current administrative system appears to demonstrate a preference for information which represents expert scientific and technical views.

5.2.6 Rigorous Testing of Change Proposals
Thus far, this research question has considered the level of rigour provided during the evaluation of submitted change proposals. This section now moves on to an analysis of the rigour applied when developing outcomes and drafting to content of the building code itself. This was approached by aggregating instances when the proponent’s drafted solution is modified during the rulemaking process.

The proposal for change template (Australian Building Codes Board 2012e) requires proponents to detail their proposed changes to the building code, prompting them to specify the clause numbers being modified and draft their revised wording to those clauses (Australian Building Codes Board 2016)\textsuperscript{15}. Proponents must also identify and provide evidence of the problem their proposal intends to solve. Notwithstanding this prescriptive requirement for proponent’s to identify both solution and problem, 77 of 192 proposals did not do so, instead identifying a problem without proposing a solution. Of these, 21 resulted in changes to the building code, with drafting of individual clauses developed later in the administrative process. In instances where the proponents did draft proposed solutions, some of their clause drafting was subsequently altered or replaced entirely. The frequency of each different solution is summarised in Table 5-3.

\textsuperscript{15} Chapter Six will take up a discussion on whether these prescriptive requirements for proponents to draft individual clauses may constitute a technical barrier dissuading public participation in building code development.
<table>
<thead>
<tr>
<th>Effect of Proponent’s Solution on Building Code Outcomes</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proponent’s solution accepted without change.</td>
<td>34</td>
<td>17.7</td>
</tr>
<tr>
<td>Alternative solution to that originally proposed.</td>
<td>24</td>
<td>12.5</td>
</tr>
<tr>
<td>Proponent’s solution used, but modified/edited.</td>
<td>17</td>
<td>8.9</td>
</tr>
<tr>
<td>No solution proposed. Drafting prepared by ABCB Office or Building Codes Committee used.</td>
<td>21</td>
<td>10.9</td>
</tr>
<tr>
<td>Proposal was not supported.</td>
<td>96</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 5.3: Frequency of Proposed Solutions on Building Code Outcomes

In 17 instances, the Building Codes Committee recommended that the proponent’s solution be edited, and in 24 instances replaced it with an alternative. By exploring options outside those canvassed in the initiating change proposal, the current processes appear to evidence a system applying a level of analytical rigour. However in reaching this finding it is noted that many solutions are developed or modified on the basis of technical information, reinforcing findings from Chapter Four that current processes may be dominated by expert views. While rigorous, current testing of the rationale for regulation does not appear to consider societal expectations.

5.2.7 Summary of Observations and Discussion
The analysis in this section found that this administrative process applies outcomes beyond simple binary decisions to either support or reject change proposals. The recommended outcomes include referring issues to gather further information or perform additional analysis, suggesting a process which provides the administrative agency with opportunities to apply levels of analysis to inform regulatory decisions. However, case analysis found that the majority of proposals were referred to other decision making or information gathering fora to expedite meetings or allow non-critical technical aspects to be evaluated outside of routine processes.

Seventy seven proposals identified problems with the current building code without proposing a solution. The high incidence of these incomplete proposals was unexpected, as the template (Australian Building Codes Board 2012e) and guidance documentation (Australian Building Codes Board 2016) specifically requires proponents to identify both. This finding indicates possible
misalignment between the change proposal template, the way it is interpreted by proponents, and the objectives of the Australian Building Codes Board.

Where proponents did propose a solution to the identified problem by drafting clause changes, the majority were modified, edited or replaced by alternatives. This may indicate rigour in the administrative process, but may also suggest a process where the analytical rigour biases outcomes towards those participants who are expert in the science or regulation of building, potentially leaving non-expert participants with less influence over outcomes. Relating this observation to Yackee’s (2014) research on participant voice presents a possibility that although non-expert participants are active in the current building code processes, their voice may be diluted by expert review and amendment.

When considering administrative processes, current practices provide participants on the Building Codes Committee with the discretion to either directly recommend building code changes or refer cases to a broader forum for additional information or more detailed analysis. This discretion suggests current administrative processes used by the Australian Building Codes Board provide opportunities for analysis to inform the regulatory decisions. Whether this translates to a rigorous test of the rationale for regulation, and thereby meets the objective in the Intergovernmental Agreement, is not yet answered. The predominance of referrals to building experts and absence of referrals to non-technical fora, suggests the process may not currently provide a level of analysis which brings balance to information used to inform regulatory decisions.

5.3 Research Question 6 – Impact on Stringency

The Intergovernmental Agreement sets an objective to ‘establish codes and standards that are the minimum necessary to efficiently achieve the relevant mission of ensuring safety and health, and amenity and sustainability objectives’ (Commonwealth of Australia 2012, p. 8). This objective reflects Australian Government requirements for outcomes to comply with Council of Australian Government (COAG) principles, and Office of Best Practice Regulation (OBPR) guidelines that ‘regulatory intervention should be the minimum effective regulation to achieve the Government’s objectives’ (2007, p. 139).

Stringency is a measure of how onerous regulation is on those who are required to comply. In the context of changes to a building code, adding requirements where none currently exist would represent stringency increases, while relaxing or removing current requirements would decrease stringency. The current change proposal template (Australian Building Codes Board 2012e) does not
require proponents to specifically nominate whether their submitted change seeks to increase or decrease stringency.

Croley makes the statement ‘interest groups find influence in the form of curtailing the scope of a proposed rule rather than altering the rule’s content...interest groups do not get what they want from agencies, but merely less of what they do not want’ (Croley 2008, pp. 132-3). His proposition that participation by interest groups may curtail proposed rules suggests that increasing the level of participation in rulemaking may reduce the stringency of proposed regulatory outcomes. In contrast to Croley’s (2008) view, the Australian Productivity Commission’s (2004) review of building regulation found that including a consensus view of societal expectations may move building regulations away from minimum requirements and towards best practice. Rein’s (1983) three competing imperatives of legal, rational defensibility, and participant consensus may provide a mechanism to explain the Commission’s findings. As the number of participants in rulemaking increases, achieving outcomes that are rationally defensible to all participants will be more difficult and may require outcomes of increased stringency in order to achieve consensus.

The prior literature and Productivity Commission findings present conflicting views without resolving whether increased participation is a catalyst for decreased or increased stringency. While not excluding the potential that given certain conditions both views may hold true, this research was approached with respect to the Australian Government’s objective for outcomes delivering minimum regulation. The research question is therefore drafted from a proposition that increasing levels of participation may drive regulatory outcomes towards increased stringency and best practice outcomes.

Research Question 6: Does increased participation in the administrative process lead to aspirational regulatory outcomes, violating the Board’s objective to provide ‘minimum codes and standards to ensure safety, health, amenity and sustainability objectives’?

5.3.1 Approach to the Question
The analytical approach drew on methodology used by McKay and Yackee (2007) when measuring interest group effects on U.S. Federal regulations. They define a three-point scale which distinguishes changes in bureaucratic policy between more, less, or the same levels of government involvement. This scale was adapted to assess increases or decreases in regulatory stringency. The proposed changes to stringency were established for each of the 192 change proposals in this study in Section 4.5.3.1. These results were cross tabulated by participant type, then tracked through to their outcomes in the published building code. The analysis was completed with case studies of individual change proposals that resulted in stringency changes in the published building code.
5.3.2 Stringency and Participant Type
Change proposals were analysed to evaluate the change in stringency they would, if accepted, cause in the published building code (see Section 4.5.3.1 for detail). Not all proposals sought to effect material changes to stringency, with many submitted to rectify errors in the existing building code or implement editorial changes to improve clarity. Of those calling for material changes, each was analysed using McKay and Yackee’s (2007) scale to ascertain whether they proposed an increase, decrease or no change in stringency (Table 5-4).

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased stringency</td>
<td>48</td>
<td>25.0</td>
</tr>
<tr>
<td>Decreased stringency</td>
<td>30</td>
<td>15.6</td>
</tr>
<tr>
<td>No change to stringency</td>
<td>Correction of errors</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Editorial changes/clarifications</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 5-4: Proposed Change in Stringency to Australia’s Building Code

To consider the relationship between the type of participant and stringency, each proposed change is cross-tabulated using the segmentation developed in Figure 4-2 (details in Table 5-5).

<table>
<thead>
<tr>
<th>Proponent Type</th>
<th>Change in Stringency Proposed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decreased</td>
<td>Increased</td>
</tr>
<tr>
<td>Independent Company</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Industry Associations</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Councils, Shires and City Governments</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>ABCB Office</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Other Government</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>General Public</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>State Government Administration</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Standards Australia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>30</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

Table 5-5: Cross Tabulation of Proponent and Stringency Change
A difference is observed between proposals generated by the ABCB office and those of all other proponents. Three of 29 (10.3%) ABCB Office proposals call for a change in stringency. This is a lower rate than 75 of 163 (46%) proposals generated by those external to the administration. Further, all three ABCB Office proposals call for decreased stringency.

Collating proposals from government proponents that are part of the Australian Building Codes Board administrative process (the ABCB Office and State/Territory Administrations detailed in Figure 4-2) finds five which decrease and one which increases stringency. Those from other unrelated Government areas (councils, and other government) propose three increases in stringency and 15 decreases. As identified in Section 4.5.3.1, when expressed as a ratio the government groups involved in building code administration show 5:1 bias towards decreased stringency, while other areas of government show a ratio of 5:1 for stringency increases.

This bias was interpreted in two ways. The first suggests government participants not directly active in administration of the building code drive higher levels of stringency change than those parties to the Intergovernmental Agreement. This indicates a positive correlation between increased participation and increased stringency. A second interpretation is that as the administrative agency with responsibility for the management of the building code, the ABCB Office uses this change process to primarily address aspects of error correction or clarification. The documented sources of information used in this study do not allow a qualitative exploration of the motivation of these government participants, and therefore this research does not attempt to establish causation for this bias.

A clear differentiation between the direction of stringency change proposed is also observed in industry participants. Of 18 Industry Association proposals calling for stringency change, a ratio of 2:1 propose decreases in stringency. By contrast, 29 proposals from independent companies show a 2:1 ratio towards increased stringency. Based on a natural assumption that industry associations would represent the views of their members, the observed lack of correlation between individual companies and the associations that represent them was an unexpected finding. This difference may be explained by an Industry Association’s focus on lowering compliance costs for the companies they represent collectively, and thereby calling for reduction in regulatory stringency. By contrast, individual companies propose changes in response to narrow commercial or competitive factors, looking to the regulatory environment to protect or expand their market position, and therefore call for increased stringency.
Overall, the cross-tabulation in Table 5-5 identifies differences in the direction of stringency change proposed by each participant type. As identified in Section 4.5.3.1, the direction of stringency change proposed by one group of participants appeared to be offset by another group’s proposals. This offset was identified in both government and industry segments. Based on this difference amongst participants it does not appear that increased participation results in increased stringency, assuming participation remains balanced.

However, proposals from the general public and independent persons are skewed towards increased stringency (6:1). This suggests that increasing participation by the general public, without a balance from other participants with expertise in setting regulation may result in increased stringency. This potential is recognised in the Australian Productivity Commission’s (2004) review of building regulation, which finds regulation biased towards societal expectations may drive aspirational regulation and not deliver the most efficient outcomes. In response, the Commission recommends greater emphasis on the views of ‘fully informed community members’ (Productivity Commission 2004, p. xxviii) which evaluates ‘what people want’, but in the context of a cost benefit analysis applied by experts in the domain.

Analysis of the proposed direction of stringency change was applied to evaluate the influence of different participant types on the Intergovernmental Agreement’s objective for minimum standards. However this objective applies to regulatory outcomes, not proposed changes. Therefore, the next section focused analysis on proposed changes which actually translated to changes in the published building code.

5.3.3 Effect on Building Code Changes

The administrative processes of the Australian Building Codes Board appear to filter out a higher percentage of proposals which call for changes to stringency, whether increased or decreased, than those proposing no change. Of the 192 change proposals analysed, 78 resulted in changes to the published building code. Of those 78, eight altered the code’s stringency. Four of 48 proposals (8.3%) calling for increased stringency and 4 of 30 (13.3%) calling for decreased stringency translated to changes in the published code. By contrast, 61.4% of proposals not changing stringency, those of an editorial or administrative nature, translated to changes in the published code.

This large difference in the amount of accepted proposals introduces a question of whether the participants submitting proposals or the participants in the administrative processes which decide whether to accept those proposals are most representative of societal views. This research does not assume that the initiation of change represents societal views and the administrative process does not. It may be as equally valid that initiation is biased by influence from particular interest groups,
as found by Golden (1998) and Furlong (1997), with the participative administrative process applying societal filters to that bias.

In relation to this research question, it appears that calls to change regulatory stringency by actors submitting change proposals are filtered by later review stages in this administrative process. While this research does not attempt to judge whether this filter is in the public interest, it does find that this implementation of expert committee review appears to offset the potential for aspirational regulatory outcomes.

5.3.4 Summary of Observations and Discussion
This research question was approached from a proposition that increased participation may drive increased building code stringency. Of 78 proposals calling for changes in stringency, 75 were generated by participants external to the administrative agency of the Australian Building Codes Board. Of these, 48 called for increased stringency compared to 27 calling for decreases.

At a simplistic level it could be interpreted that as external participants predominantly call for increased stringency, increasing their participation, or more specifically increasing their influence, may result in drivers which increase the stringency of the resultant building code. This view is adopted by the Australian Productivity Commission (2004) in their recommendation to temper the influence of community expectations with an informed cost benefit analysis. However, this research has found that stringency change may also be self-regulated by the diversity of participants balancing drivers between increases and decreases.

When considering drives towards increased or decreased stringency, differences are observed between the types of participant. In addition to anticipated differences between government and industry, results indicate an unexpected complexity within groups. Government departments responsible for building regulation showed a propensity to decrease stringency, offset by calls for increases by other government bodies. In industry, differences were found between industry associations calling for decreased stringency and their individual member companies calling for increases. The first finding from this research question is that current participation is diverse and assuming similarities across industry or government sectors, ignoring subtleties of specific regulatory drivers within each, may be misleading. This observed diversity may also affect the balance of participants at subsequent review stages in the administrative process thereby influencing whether proposals translate into the published regulation.

The analysis found that the influence of external participants driving increased stringency is currently tempered by the effect of subsequent administrative processes and expert review. The
analysis revealed that this process excluded the majority of proposals which sought to increase stringency. The effect that participation during later stages of rulemaking may moderate imbalances in submitted change proposals aligns with Croley’s (2008) view that the rulemaking process curtails the scope of proposed rules, and is an important finding of this research. It guides this study to delve below the generalised condition to encourage participation, and consider the types of participants and their specific role in the different stages of the rulemaking process.

Specifically answering this research question, participation in the administrative processes used to develop Australia’s building regulation does not appear to drive outcomes above minimum requirements. However, this finding is based on the 192 proposals analysed and current participation levels. Section 4.5 of this thesis identifies that changes in the balance between participant types may lead to domination by particular views. Therefore, material changes in the balance of participants initiating change may, without moderating influences at later stages in the rulemaking process, alter this outcome.

5.4 Research Question 7 - Regulatory Alternatives

This section explores whether the administrative process responds to the problems submitted in change proposals using pathways other than explicit regulation. Breyer (1982, p. 185) argues that classical regulation ‘ought to be looked on as a last resort’. Croley (2008) explains that systems which provide evaluation of alternative regulatory options would allow agencies to choose socially beneficial regulation. In Australia, the Commonwealth Government Office of Best Practice Regulation (OBPR) outlines a spectrum of non-regulatory options (Office of Best Practice Regulation 2007), with a preference for decision making processes that consider alternatives to explicit regulation.

The Intergovernmental Agreement sets and objective for the Australian Building Codes Board to ‘encourage reduced reliance on regulation by providing a forum to explore alternative mechanisms for delivering outcomes’ (Commonwealth of Australia 2012, p. 8). This research question evaluated whether the current practices of this administrative agency apply processes which respond to regulatory problems by exploring solutions which lie outside the specific content of the building code.

Research Question 7: To what extent do current processes apply a spectrum of regulatory and non-regulatory options, meeting the objective to ‘encourage reduced reliance on regulation by exploring alternative mechanisms to achieve outcomes’?
5.4.1 Approach to the Question

Abraham Maslow stated ‘it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail’ (Maslow 1966, pp. 15-6). Applying Maslow’s view to this research question, the administrative agency whose tool is a building code may show a preference to treat all problems using that tool. This research question was approached from the proposition that the Australian Building Codes Board predominantly responds to change proposals by applying regulatory solutions based on revising or extending the published building code.

The evaluation first identified administrative alternatives to regulation, then measured which alternatives are explored during the current administrative processes. A case analysis was applied to instances where non-regulatory solutions were explored to understand how the administrative processes considered those alternative mechanisms.

5.4.2 Alternatives to Explicit Regulation

The Australian Office of Best Practice Regulation (2007) presents regulatory alternatives along a spectrum (Figure 5-1), from low to high regulatory involvement.

![Figure 5-1: Simplified Spectrum of Regulation.](image)

**Showing a range of alternatives to explicit government regulation and the level of government involvement in each.**

*Source: Office of Best Practice Regulation Handbook (2007)*

The low end of this spectrum leaves regulation to the market place. Market forces determine the standards applied and rely on mutual obligations of an industry or professional body to establish behaviours (Office of Best Practice Regulation 2007). Quasi-regulation provides additional guidance to the establishment of these behaviours through promulgation of non-binding rules, codes of conduct and agreements between industry and government (Office of Best Practice Regulation 2007). An example of this approach is the process of Australian laboratory accreditation, where a Commonwealth Memorandum of Understanding recognises the National Association of Testing Authorities as the peak body, which then accredits both private and government laboratories (National Association of Testing Authorities 2013).

Co-regulation outcomes are instances where industry collectives, either associations or professional bodies, develop guidelines or codes of operation. The government provides legislative support
which allows those codes to be enforced (Office of Best Practice Regulation 2007). Legislative arrangements can also extend to compel an industry to develop codes, or to be subject to standards developed by an administrative agency (Office of Best Practice Regulation 2007).

At the high end of the spectrum, explicit government regulation, sometimes called black letter law, is enacted through primary and subordinate legislation (Office of Best Practice Regulation 2007). Considered to offer the greatest certainty, it looks to change behaviours by imposition of punitive sanctions for non-compliance (Office of Best Practice Regulation 2007).

5.4.3 Alternatives Explored in the Current Administrative Process

The 192 change proposals were coded for the range of outcomes recommended by the Building Codes Committee (Table 5-6).

Outside of the regulatory outcome of ‘placed in building code’ or outright rejection of the proposal, Table 5-6 shows two further pathways. Deferral options, which cover proposals referred to project groups or technical committees for further analysis, are not seen as applying non-regulatory options. They simply delegate decisions to other expert fora.

<table>
<thead>
<tr>
<th>Proposal Recommendation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placed in building code</td>
<td>68</td>
<td>35.4</td>
</tr>
<tr>
<td>Non-Regulatory solutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placed in Guide to the building code</td>
<td>11</td>
<td>5.7</td>
</tr>
<tr>
<td>Other informative method applied</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Deferral Options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referred to project group with outcome to be decided</td>
<td>15</td>
<td>7.8</td>
</tr>
<tr>
<td>Referred to Australian Standards Technical Committee</td>
<td>8</td>
<td>4.2</td>
</tr>
<tr>
<td>Rejected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Outcome</td>
<td>89</td>
<td>46.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>192</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 5-6: Frequency of Change Proposal Recommendations

Outcomes which place information in the Guide to the building code (Australian Building Codes Board 2012b) or use other informative methods are considered as non-regulatory solutions. This coding indicates that only a small range of these alternative non-regulatory pathways are explored and few proposals are recommended for solutions using non-regulatory outcomes.
5.4.4 Qualitative Analysis of Non-Regulatory Cases

Table 5-6 identifies twelve cases where change proposals resulted in exploration of non-regulatory solutions (eleven published in the Guide to the building code and one applying another informative method). Of these, three proposals were specifically directed at changing the Guide, so do not represent examples where administrative process explored this solution as an alternative to building code changes. Therefore nine proposals demonstrate where a proponent’s call to change the building code was instead resolved through non-regulatory means. Each of these proposals is analysed to identify the extent to which administrative processes actively explored regulatory and non-regulatory options. For identification purposes, the proposal resulting in ‘Other Informative Method’ is designated RQ7-I-1 and the eight proposals resulting in changes to the Guide are designated RQ7-G-1 through RQ7-G-8.

Proposal RQ7-I-1 sought to regulate the requirements for the approval of software packages used by practitioners to demonstrate conformity with the building code. The meeting minutes show further regulation of software was not supported, but the Building Code Committee agreed to consider practitioner education by articles in appropriate industry publications. This change proposal did not proceed to changes in the building code but instead recommended that industry education be applied as an alternatives.

Key aspects of the case analysis of eight proposals which were resolved by making changes in the Guide, are detailed in Table 5-7 and Table 5-8. These provide a precis of Committee discussions along with the subsequent recommendations and outcome.
<table>
<thead>
<tr>
<th>Proposal</th>
<th>Discussion at Building Codes Committee</th>
<th>Proposal Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ7-G-1</td>
<td>Proposal relates to the interpretation of facilities required by the building code. ABCB Office noted the proponent’s interpretation was not aligned with the intent of those clauses.</td>
<td>As other practitioners may reach similar erroneous interpretations, recommended to clarify interpretation of this clause in the Guide. Did not consider other regulatory options.</td>
</tr>
<tr>
<td>RQ7-G-2</td>
<td>Proposal relates to interpretation of definitions in Building Code. Proponent cites interpretation which forced installation of additional life safety measures. ABCB Office proposed two options; rewrite the definition in the Building Code (normative) or clarify in the Guide (informative).</td>
<td>Building Codes Committee elected to place clarification in the Guide. Did not record that proponent had misinterpreted the provision, but noted the multiple interpretations. Considering both normative and informative options demonstrates system considering non-regulatory alternatives.</td>
</tr>
<tr>
<td>RQ7-G-3</td>
<td>The proposal was found to misinterpret a provision, calling for a requirement that would have negative effects on energy efficiency performance of buildings.</td>
<td>Recommendation to clarify interpretation in the Guide, preventing further misinterpretation. Did not consider other regulatory options.</td>
</tr>
<tr>
<td>RQ7-G-4</td>
<td>Proposal cited an interpretation by a local government agency forcing additional fire resistance levels in construction. Review of documents from development of the original clauses showed interpretation to be in error.</td>
<td>Building Codes Committee recommended clarifying interpretation in the Guide. Did not consider other regulatory options; clarification to prevent future misinterpretation of the existing clauses.</td>
</tr>
</tbody>
</table>

Table 5-7: Summary of Case Studies for Regulatory Options, RQ7-G-1 to RQ7-G-4
<table>
<thead>
<tr>
<th>Proposal</th>
<th>Discussion at Building Codes Committee</th>
<th>Proposal Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ7-G-5</td>
<td>Proposal argued that recent changes had increased stringency. ABCB Office identified proponent misinterpreted clauses by not considering concessions provided for this requirement.</td>
<td>Building Codes Committee recommended clarifying interpretation in the Guide. Did not consider other regulatory options.</td>
</tr>
<tr>
<td>RQ7-G-6</td>
<td>Proposed changes to definitions for two classes of building, citing misinterpretation by consultants and certifiers.</td>
<td>Building Codes Committee recommended a change to the Guide to prevent future misinterpretation. Did not consider other regulatory options.</td>
</tr>
<tr>
<td>RQ7-G-7</td>
<td>Proposal sought new prescriptive requirements for installations in certain circumstances. ABCB Office identified a misunderstanding of the current code, and the proposal was already covered in the existing provisions.</td>
<td>Building Codes Committee agreed with ABCB Office view, recommending that clarification be added to the Guide for other practitioners. Did not consider other regulatory options.</td>
</tr>
<tr>
<td>RQ7-G-8</td>
<td>Proposal called for clarification of requirements on the basis that alternate interpretations led to incorrect fire separation requirements. ABCB Office found clarification already provided in documents directly referenced in the Building Code, so change was unnecessary.</td>
<td>Building Codes Committee agreed with ABCB Office position, but recommended adding clarification in the Guide. Did not consider other regulatory options.</td>
</tr>
</tbody>
</table>

Table 5-8: Summary of Case Studies for Regulatory Options, RQ7-G-5 to RQ7-G-8

These case studies indicate that only two of nine outcomes (RQ7-I-1 and RQ7-G-2) considered other alternatives along the spectrum of regulatory options and responded to the proposed changes with informative rather than normative outcomes. The remaining seven cases all related to misinterpretations of existing provisions, with informative clarification provided in the Guide to the building code to offset potential for future erroneous interpretations by other building code users.

### 5.4.5 Role of Non-Regulatory Solutions

This analysis has indicated few instances where the administrative process explored non-regulatory solutions. However, it can be argued that reliance on non-regulatory alternatives, those outside of explicit and enforceable regulation, may not provide adequate deterrence to non-compliance. Shavell (1998) differentiates between harm-based sanctions, where penalties are applied after harm occurs and act-based sanctions, where penalties are applied and enforced regardless of whether subsequent harm ensues. In building construction the results of failure may be catastrophic with the harm incurred beyond the financial ability of the person or entity infringing (Shavell 1998). For
example, the harm caused by the structural failure of a populated building may exceed the financial resources of a company found to supply conforming concrete. Shavell (1998) therefore concludes that act-based safety regulation is called for where ‘harm-based liability might not create a proper deterrence’ (Shavell 1998, p. 316).

The Australian Building Codes Board requires proponents submitting changes to consider non-regulatory alternatives and detail why those alternatives are not recommended (Australian Building Codes Board 2012e). While the guidelines for the proposal template identify education and market forces as alternatives (Australian Building Codes Board 2016), they do not provide guidelines for proponents on the selection of non-regulatory solutions. Proponents are unlikely to rigorously explore alternatives. Nor are proponents expected to hold expertise in the spectrum of regulation and role of sanctions to effectively evaluate the suitability of non-regulatory alternatives.

5.4.6 Summary of Observations and Discussion
This research question explored the extent to which current administrative processes considered alternative mechanisms to achieve outcomes. Analysis did not find evidence of a process that actively encourages reduced reliance on regulation. Guidelines provided to proponents of change do not explain non-regulatory alternatives, while analysis of past decisions does not indicate a rulemaking process exploring options outside of explicit regulation. This suggests Maslow’s (1966) view may be correct; building code processes tend to deliver building code based solutions.

The analysis in section 5.2 earlier in this chapter found that the Australian Building Codes Board has the discretion to apply appropriate levels of analysis to inform regulatory decisions. However this discretion does not appear to translate to a rigorous exploration of non-regulatory options. The analysis found only two examples from 192 proposals where both normative and informative regulatory pathways were considered.

However this analysis did not make an assumption that non-regulatory solutions represent a hallmark of, or are a necessity for, public interested regulation. In fact the literature suggests that non-regulatory alternatives may conflict with Shavell’s (1998) view that alternatives relying on harm-based sanctions may be inappropriate for life safety aspects of building regulation. This view is seen in responses to a major Melbourne fire in 2014 where the fire services (Metropolitan Fire and Emergency Services Board 2015a) and Commonwealth Senate Inquiry (Parliament of Australia 2015) call for increased regulation, sanctions at import borders and mandatory certification of building products. All these options represent explicit regulation at the high end of the spectrum (Office of Best Practice Regulation 2007) and deliver act-based sanctions on building practitioners.
Given the diverse government views on the suitability of non-regulatory solutions, it is not expected that actors submitting change proposals, as non-expert participants, would hold the regulatory expertise to effectively explore the full spectrum of alternative mechanisms, nor understand the implications of each option. However the current administrative processes do not provide a mechanism to address these implications, and place the onus for this evaluation onto those actors. In relation to a reduced reliance on regulation, the current processes do not appear to satisfy this objective.

5.5 Summary of Chapter Five
This chapter evaluated a practical implementation of the administrative process by studying the current practices of the Australian Building Codes Board in relation to the objectives set by its enabling Intergovernmental Agreement (Commonwealth of Australia 2012). The processes were found to provide participants and the administrative agency with discretion in rulemaking. Change proposals were addressed and responded to through a number of pathways and the process enabled opportunities for decision makers to seek analysis to inform regulatory decisions. However where broader analysis was sought, it tended to look towards building or regulatory experts for information and did not actively encourage or seek societal views. It is therefore questioned whether the objective of rigorous analysis is achieved when the administrative system does not balance different types of information relied on by the rulemaking agency.

The current system appears to meet the objective to deliver minimum regulation and appears to deliver a balance between competing views. Participants seeking aspirational levels of regulation or increased stringency tend to be offset by expert review during later stages in the administrative process and actions of the Australian Building Codes Board as an arbiter on outcomes.

The discretion evident in current processes did not appear to encourage exploration of alternatives to explicit government regulation. This low incidence of non-regulatory outcomes may be driven by a preference for explicit regulation when setting the life safety aspects of buildings. However, the current process places the onus to explore and document non-regulatory solutions on the proponent submitting a change. This suggests proponents should possess a level of expertise in regulatory process and its subsequent enforcement options, which may provide a barrier to participation in the proposal process or dissuade those who perceive they lack the expertise.

The change proposal template was also found to impose expectations on a proponent’s technical expertise, requiring them to identify the problem with the published building code and draft the necessary clauses to effect a solution. Of the proposals studied, an unexpectedly large number did
not meet this requirement, and did not propose a solution. This indicates possible misalignment between current process and the expectations of those wishing to participate in building code development. Of those proponents who did draft clause changes many were modified, edited or replaced by subsequent stages in the administrative process. While this may indicate rigour in the administrative process, it also suggests the voice of non-expert participants may be diluted or overruled by experts elsewhere in the process.

This chapter sought to explore aspects of current practice which may contribute to participatory imbalance. The analysis was approached through the theoretical orientation of administrative process theory (Croley 2008) and the proposition of balanced participation established in Chapter Four of this research. Findings from the evaluation in this chapter suggest the Australian Building Codes Board is not meeting all the objectives set by its Intergovernmental Agreement. However, it is noted that the 2004 Productivity Commission review of building regulation steered the objectives of the Australian Building Codes Board away from meeting community expectations and towards efficient regulation (Productivity Commission 2004). It is suggested that although it has been implemented for over ten years, that change of strategic focus is yet to be resolved operationally. This is evidenced by the conflicting requests for expert or societal information identified in the proposal for change template and associated guidelines for those wishing to submit proposals (Australian Building Codes Board 2012e, 2016).

The continued tension between expert and societal views, its implication on the role of participation, and information available to the administrative agency setting Australia’s building code will be explored through the discussion in Chapter Six.
Chapter 6. Discussion and Recommendations

6.1 Chapter Outline

This research aimed to evaluate the influence of administrative processes on actor participation across all stages of rulemaking by an Australian Government agency. This was approached through the theoretical lens of administrative process theory (Croley 2008) to analyse actor participation, to characterise and group participant types, to establish the role of administrative process, and to identify if current practices encourage participation. This chapter directly responds to the aim and objectives by relating the findings from the analysis in Chapters Four and Five to the literature review and the administrative processes of the Australian Building Codes Board.

The analysis identified differences between which actors have the opportunity to participate in rulemaking and which actually do participate in practice. This difference suggests that mechanisms beyond the direct rules and processes enacted by the administrative agency may influence participation. This chapter explores those indirect mechanisms, propose a theoretical model and then apply the model to current practice.

6.1.1 Structure of this Chapter

This discussion first establishes the direct influence on participation by the prescriptive rules and administrative processes implemented by the Australian Building Codes Board. Indirect influences on participation are then explored in relation to theoretical concepts identified in the literature review chapter of this thesis.

Direct and indirect influences were developed into a single model which combines Australian observations in this research with previous findings from U.S. rulemaking scholars. This model was then used to explore the tension between domain expertise and societal expectations evident in rulemaking, and how each type of information may influence the content of Australia’s building code. The current building code processes are reviewed from the perspective of this new model to identify potential misalignment between the findings made in this research and the objectives of the Australian Building Codes Board.

This chapter closes by applying the research findings to the specific practices developing the Australian building code. These are framed as recommendations for the externally facing documentation used by the Australian Building Codes Board to communicate the opportunity to participate in building code development.
6.2 Relationship between Administrative Processes and Participation

Comparison between U.S. and Australian rulemaking found similar participation rates between administrative systems with dissimilar processes. Conversely, the analysis also found differing participation rates between systems where the administrative processes are similar. This suggests participation in rulemaking is complex with a variety of participant motivations which may not directly correlate with the administrative processes alone.

In U.S. rulemaking under the Administrative Procedure Act (1946) opportunities for public participation are limited to the ‘notice and comment’ stage. This participation occurs late in the rulemaking process after the content and language of the rules are substantially set (Rinfret & Cook 2013). Studies at this stage of U.S. rulemaking agree that the general public are absent from rulemaking (Golden 1998; Rinfret & Furlong 2012), finding they are outnumbered by other interest and influence groups (Croley 2008). These U.S. studies are not able to provide information on participation during earlier stages of rulemaking (West 2004) where the agenda is set (Yackee & Yackee 2012) and rules are developed within the agency itself (Rinfret 2011), with authors noting their findings may differ if these stages were studied (Rinfret & Furlong 2012).

In contrast, the formal rules and processes used to develop Australia’s building code (Commonwealth of Australia 2012) provide opportunities for participation across all stages of rulemaking as a proponent may submit a change proposal, contribute to technical review by membership of the Building Codes Committee, make public comments against draft documents (a parallel process to U.S. notice and comment), or act as an industry representative on the decision making Board. Australian processes analysed in this research enabled study of the entire rulemaking process, providing information on participation at stages not accessible to U.S. scholars.

Over the four years studied in this thesis, 192 change proposals initiated by 95 individual proponents were received by the administrative agency. Of these, 16 proponents were affiliated with the Australian Building Codes Board while the majority of the remaining proposals were generated by industry members. The general public submitted nine proposals (4.7%). This rate of public participation is similar to Golden’s (1998) finding at the public comment stage (5.06%). Although Australian processes allow public participation in the pre-proposal stages not accessible in U.S. rulemaking, the percentage of participation by the general public is similar.

Comparison of U.S rulemaking to the procedures used by the Australian Building Codes Board found the administrative processes at the ‘public comment’ stage to be similar. In both Australia and the U.S. a draft of the proposed rules is made available for public review and opportunity provided for
anyone to submit comments and feedback. Submitted comments are reviewed by the administrative agency responsible for the rules being made prior to deciding the content of the final rule (Kerwin 2003; Office of Best Practice Regulation 2007). The analysis found the Australian Building Codes Board received 71 comments against 80 published rule changes, averaging less than one comment per rule. This participation rate is further diluted when comments by government departments are excluded, finding only 23 non-government comments over four years. These results are noticeably lower than comments measured in U.S. studies (Golden 1998; West 2004), which found 43 and 172 comments per rule respectively. Although the rules and administrative process are similar at the notice and comment stage, participation rates in Australian building code development are found to be lower than observations in U.S. studies.

The analysis found an absence of correlation between the administrative processes used by a rulemaking agency and the observed participation levels. This suggest an actor’s decision to participate in rulemaking may be influenced by, or motivated by, factors outside of the formalised rules of administrative process. This supports Croley’s (2008) view which makes a clear distinction between who can participate and who actually shows up.

Having established that process and participation may not correlate, the problem addressed by this research is to look at influences on actor participation beyond prescriptive rules and procedures. To explore these influences this discussion chapter will follow Croley’s (2008) approach, first establishing direct influence by considering the question of who can participate, then comparing this to who actually does participate to provide insight on indirect influences.

6.2.1 Direct Influence of Administrative Processes on Participation
Analysing participation in the development of Australia’s building code indicated that not all rulemaking stages are equally accessible to all participants. At one extreme, rules and processes can exclude participation. The Australian Building Codes Board excludes participants by restricting access to particular types of government bodies or limiting the voting rights of industry members (Commonwealth of Australia 2012). At the other extreme, participation on the Australian Building Codes Board by State and Territory building administrations is mandated (Australian Building Codes Board 2015a).

Between these two extremes, this research identified participatory pathways along a spectrum. The Intergovernmental Agreement allows up to five industry members on the Australian Building Codes Board, but also provides that the Board can operate without these members. This represents discretionary participation, where participative pathways are available but at the discretion of the administrative agency.
The formal proposal for change process used by the Australian Building Codes Board (Australian Building Codes Board 2012a) also provides a non-discretional pathway with open opportunities for any actor to participate. However findings showed that providing open access to rulemaking did not necessarily translate to actual participation. Seventy-nine independent proponents (those not otherwise associated with the Australian Building Codes Board) participated by submitting change proposals over four years, compared to 52,000 registered online recipients of the resultant building code (Savery 2015). The level of building code awareness is three orders of magnitude above the measured participation rate and appears to support U.S. findings that providing access to rulemaking does not necessarily lead to participation (Daley 2012; Yackee 2014).

This observed absence of participation in a process which provides open access to rulemaking suggests that achieving actual participation may require administrative agencies to adopt practices which go further than providing opportunities to participate. This seems to validate Croley’s (2008) condition to encourage participation in the rulemaking process. However the differing levels of participation identified through this research suggests encouragement may not be a binary condition. Selectively inviting participants into the administrative process would represent a low level of encouragement. The composition of the Building Codes Committee (Australian Building Codes Board 2015b) provides an example of invited participation where the Australian Building Codes Board asks selected groups and industry representatives to participate in the rulemaking process through membership of this technical forum. An increased level of encouragement is seen when the invitation to participate is extended beyond selected participants to all potential actors in the rulemaking process. The Australian Productivity Commission inquiries (Productivity Commission 2015), cited through analysis in Chapter Five, used advertisements in the national media and direct approaches to known industry stakeholders to maximise awareness.

The range of participatory opportunities identified during analysis of the processes used by the Australian Building Codes Board are proposed as a spectrum from exclusion through to mandatory participation (Figure 6-1).

The concept that administrative agencies may use processes which encompass alternatives beyond simply allowing or disallowing participation is not new. Harter (1982) argued that allowing open access to rulemaking without procedural controls may lead to an adversarial process, and proposed selective participation to coordinate negotiated rulemaking between invited participants. Rossi (1997) also expressed his opposition to simply opening public access to rulemaking and suggested the process would be improved by regulating access. Houle (2010) proposed to move beyond simply allowing participation by legally mandating consultation in the rulemaking process. These early
views to regulate the level of participation are combined with Croley’s (2008) condition to encourage participation into the single spectrum developed in this thesis.

![Participatory Spectrum Diagram]

**Figure 6-1: Participatory Spectrum**

The range of opportunities for participation presented as a spectrum from exclusion through to mandated involvement.

Source: Author

Chapter One of this research established a proposition that the rules and processes enacted by an administrative agency may directly and indirectly influence participation. The direct influence exerted by the administrative processes used to set Australia’s building code are reflected in the spectrum proposed (Figure 6-1). The analysis has also established that providing access to rulemaking does not necessarily lead to active participation. The disconnect between rules, access and participation suggests a finding that simply providing access to the rulemaking process will not satisfy Croley’s (2008) condition to encourage participation.

If open administrative processes do not translate into actor participation, what other mechanisms are indirectly influencing actual participation?

### 6.2.2 Other Mechanisms Influencing Participation

In principle, the processes set by the Intergovernmental Agreement (Commonwealth of Australia 2012) allow anyone to submit a proposal at the start of the rulemaking process and participate at later stages by providing comments against a published draft of the building code. In practice, the analysis found active participation by groups who are identified in the Intergovernmental Agreement (Commonwealth of Australia 2012) but an absence of the general public and industry segments who are not specifically recognised in the Agreement.

For example, the trade unions are not recognised in the current Intergovernmental Agreement (Commonwealth of Australia 2012) and do not participate on either the Building Codes Committee or Australian Building Codes Board. Given the trade union movement has a predominant role in Australia’s building and construction sector (Green & May 2003) this absence may suggest that they are unjustly excluded from building code development. However over the four years studied, trade unions have not submitted a change proposal, nor submitted comments against changes proposed...
by others. Are the unions excluded from participation, choosing not to participate, or otherwise dissuaded from participation by another mechanism? A similar question can be mounted for the observed absence of the general public, consumer groups, environmentalists and a multitude of other interests affected by Australia’s building regulation.

What issues may be leading to this observed absence of participation in Australia’s building code and what mechanisms in current processes might be influencing potential participants? The influence of the administrative agency, the participant’s perception of their voice and the concept of information capacity are explored.

6.2.3 Influence of the Administrative Agency
The role played by the administrative agency in a rulemaking process may provide insight on how it facilitates participation and therefore influences potential participants. Golden (1998) describes the role of administrative agencies as an arbiter, mediating between groups much as an umpire does in sporting competition. Her finding aligns with the pluralist’s view where agencies balance competing interests (Stewart 1975). However an administrative agency acting as an umpire would not care which interests win or lose. Its role would be restricted to enforcing the rules of play.

In 2004 the Australian Productivity Commission recommended ‘community expectations’ be removed from the mission statement of the Australian Building Codes Board, steering its objectives towards efficient regulation (Productivity Commission 2004, p. xxv). The Productivity Commission reasoned that as the general public do not have complete information, ‘community expectations may not provide the most appropriate level of building performance for regulation’ (2004, p. 90). This conflict between society and experts is also evident in Garrett’s (2000) challenge to Croley’s (2008) administrative process theory where she questions the definition of public interested outcomes, arguing that policies serving the broad interest may be wasteful and not socially beneficial.

The recommendations of the Productivity Commission redirected the goal of the Australian Building Codes Board away from alignment with societal expectations and towards efficiency to ‘maximise net benefits to the economy and society’ (Productivity Commission 2004, p. 92). The Chair of the Australian Building Codes Board queried this change, concerned it would signal ‘that the ABCB no longer planned to heed what the community wants’ (Productivity Commission 2004, p. 94). It is argued that excluding this community view has introduced a conflict with the Australian Legislative Instruments Act (2003), which encourages administrative agencies to seek participation by domain experts and citizens who may be affected by the regulatory outcomes (Australian Government Solicitor 2014). The tension between efficient building regulation and societal expectation is still
seen in Australia and evident in the City of Melbourne’s housing strategy (2014) identifying that minimum liveable sizes are not included in Australia’s building code despite negative effects on the resident’s quality of life.

This research argues that setting objectives for the Australian Building Codes Board shifts its role from the pluralist’s view of an arbiter balancing the views of external participants, to a neopluralist perspective where the agency itself becomes an active participant. The Intergovernmental Agreement (Commonwealth of Australia 2012) establishes objectives for regulatory outcomes to increase industry efficiency, set minimum necessary standards, encourage harmonisation across States and Territories, consider non-regulatory solutions, ensure requirements are performance based, and accord with the strategic priorities of the Building Ministers Forum (Commonwealth of Australia 2012; Productivity Commission 2004). In enacting its role to achieve these objectives, this thesis contends the Australian Building Codes Board has become an active participant in the intergroup rivalries, with its own agenda for the regulatory outcomes.

In this role as expert participant the Australian Building Codes Board provides opportunities for participation, but the analysis found it appears to favour information from domain or regulatory experts who align with the achievement of its objectives. The main influence and decision points in the administrative process are provided through the membership of the Building Codes Committee and industry representation on the Australian Building Codes Board itself (Commonwealth of Australia 2012). Aggregating the opportunity for participation across all stages of building code development identified 26 opportunities for government participants who are formally identified in the Intergovernmental Agreement (Commonwealth of Australia 2012), and 16 for independent groups and other government areas. Composition of the Building Codes Committee is at the discretion of the Australian Building Codes Board’s administrative office. Current participation indicates a balance between government and industry interests, with twelve participants from each group. Industry participants are split between five professional bodies representing commercial interests and seven industry associations representing expert disciplines in building and construction. Both fora appear to favour government and industry experts.

Therefore while current administrative processes do provide opportunities for general public participation, analysis indicates a preference for inviting or encouraging experts. The Building Codes Committee is primarily convened as a technical forum and does not include representation from general society, consumers or unions. In U.S. building regulation ‘most building code and review boards are comprised of construction industry professionals’ (Shapiro 2016). Nixon, Howard and DeWitt (2002) identify a similar role taken by the U.S. Securities and Exchange Commission finding
its domain expertise, while reducing potential for it to be overly influenced by dominant interests, sets it as a participant amongst the rivalries between industry influence and the investing public.

As an administrative agency responsible for achieving the objectives in its Intergovernmental Agreement (Commonwealth of Australia 2012) the Australian Building Codes Board therefore appears to take the role of expert participant in the process rather than arbiter. Participation on formal committees active in administrative process is encouraged, but membership of the Building Codes Committee or industry representation on the Board suggests a discretion towards domain or regulatory experts. Community expectations are not a priority and societal expectations are not expected to deliver the most efficient regulatory outcomes with the greatest economic net benefit (Productivity Commission 2004).

This findings of this research imply that the expert participant role taken by the Australian Building Codes Board and observed bias towards information from actors who can provide technical information or consider regulatory change from the perspective of economic net benefit may negatively influence participation by those actors unable to offer this expertise. The next section explores a theoretical basis for this negative influence.

6.2.4 Influence of Participant Voice and Information Capacity
Yackee (2014) proposed a mechanism by which an actor’s ability to share technical information, defined as information capacity, may influence their decision to participate in rulemaking. She found a belief amongst citizens that their voice is heard, but an underlying perception that organised interests have an advantage in influencing rulemaking agencies. A participant’s self-perception of their knowledge and expertise is an important predictor of their perceived influence in relation to those organised interests. Those able to share technical information ‘perceive a more meaningful voice’ (Yackee 2014, p. 445). Yackee (2014) concluded the relationship between a participant’s ability to bring expert information to the rulemaking process and their perceived voice may affect participation levels.

Perception of voice is driven by participants having meaningful influence and an ability to ‘make persuasive arguments to public agencies’ (Yackee 2014, p. 445). A perceived absence of efficacy on rulemaking outcomes may dissuade participation. Therefore, an administrative process which demonstrates a balanced responsiveness to participant interests may offset perceptions that information capacity is a necessity. This contention was evaluated in the context of the setting of Australia’s building code, by assessing the preparedness of the administrative agency to change its views in response to participation, and by the nature of information which influenced the language of the published code.
6.2.4.1 Predominance to Respond to Input from Experts

‘One of the enduring questions surrounding rulemaking is the degree to which administrators use public feedback to inform the content of government regulations’ (Yackee 2013, p. 105). The preparedness of an administrative agency to change its views in response to participant feedback may influence the perception of a meaningful voice.

This research measured the Australian Building Codes Board’s response to participant input at two points in the administrative process. The first is where the members of the Building Codes Committee review recommendations made by the ABCB Office against each proposed change. For 192 proposals analysed, analysis identified 26 instances where ABCB Office staff and experts on the Building Codes Committee did not agree. Of these the Committee’s expert recommendation was followed 23 times, with 22 instances proceeding through subsequent decision stages to be published in the final code. The second response point was through the public comment process where anyone can provide feedback in response to a draft of building code changes. Of 80 changes in the draft, comments were submitted against 33. Three were modified following public comment while 30 proceeded to final publication without edits.

These two points in the administrative process present differing responses to participant input. At Building Codes Committee the ABCB Office showed a preparedness to change its view. In contrast, feedback at public comment rarely changed the outcome. It is suggested that these different observations may reflect the different levels of expertise held by the participants providing feedback.

Although suggesting expertise as an influence, this discussion also recognises an alternative explanation where the two points analysed represent different stages in rule development. The Building Codes Committee reviews the submitted change proposal and ABCB Office’s recommendations before the detailed drafting which sets the language of the rule has occurred. The administrative agency has little effort invested in the regulatory outcome at this early stage and may be more accepting of views which differ from its own. Public comment submissions occur later in the process when administrative effort negotiating and drafting changes to the building code is complete. The agency is invested in each change and may be more resistant to alterations. This observation of inertia later in the process is found in Golden’s (1998) U.S. research at the ‘notice and comment’ stage, where ‘comments in support of a rule were likely to get the final rule they desired, and those who objected were likely to get only minor concessions’ (Golden 1998, p. 262).
To remove the complexity of analysing differing stages of rule development, this discussion now focuses on the influence of expert and non-expert participants at the early stages of rulemaking when the language of the rule is set.

### 6.2.4.2 Language of Rules Set by Experts but Responsive to Non-Experts

Scholars of U.S. rulemaking found that the language of rules was set at pre-proposal stages (Rinfret 2011; Rinfret & Furlong 2012; West 2009) and not within public view (Wagner, Barnes & Peters 2011). While the U.S. system permits participation at the later public comment stage, it ‘occurs within relatively narrow bounds’ (West 2004, p. 71) and does not encourage open-ended discussions on policy (West 2004). In the administrative processes of the Australian Building Codes Board, initiation through submission of a change proposals is open to the public. Does this public access to early stages of rulemaking allow non-expert participants to influence the language of the rules?

The opening question on the proposal for change template (Australian Building Codes Board 2012e) requires proponents to identify the specific clauses they wish to change and then provide draft wording for their proposed changes (Australian Building Codes Board 2016). Identification of the problem to be solved, and providing information to evidence that problem, is addressed at questions two and three on the template. Question four and five return to technical detail, asking proponents to demonstrate how the drafted changes will solve the problem and then outline other regulatory and non-regulatory solutions that have been considered.

The template’s requirement to draft the proposed clause changes may allow proponents to influence the language of the building code, but the prescriptive nature of its questions may also imply that proponent should possess expertise in drafting in order to propose a change. Applying Yackee’s (2014) findings on information capacity, this implication of necessitated expertise would potentially dissuade non-experts from participation. This mechanism may explain the findings in this research’s analysis where only 4.7% of proposals were submitted by private citizens. It may also explain the low translation of drafted proposals into the building code, where only nine of 163 independent proposals were directly reflected in the final publication.

The low rate of translation from proposal to published code does not imply that proponents were ignored in this rulemaking process. Although only nine proponent solutions were published, 69 of 163 independent proposals effected change in the published code. The difference of 60 proposals was traced to instances when experts at later stages in the administrative process redrafted the proponent’s changes. In these instances experts on the Building Codes Committee or Australian Building Codes Board staff accepted that the problem the proponent was attempting to address warranted action, but developed an alternative solution. The high instance of proposals where the
proponents problem warranted regulatory action, but their proposed solution was deemed unacceptable suggests the prescriptive requirement to draft clauses adds an unnecessary technical hurdle to current practice.

As 60 of 69 changes to the building code used clauses drafted by experts in preference to those drafted by proponents, the language of the rules which make up Australia’s building code, like findings in the U.S (Rinfret & Furlong 2012), is predominantly set by experts. This research does not question the merits of expert drafting, nor having the language of final rules set by those expert in both building technology and regulation. It does however reach a conclusion that the implied expectation for participants in the change proposal process to have the expertise to supply detailed clause drafting may discourage participation by the general public and others not expert in building.

This conclusion should not be taken to suggest that information provided by those without specific building expertise is not valuable to the Australian Building Codes Board. Where non-expert submissions were made, a case analysis identified that the administrative process did not exclude badly prepared or poorly drafted proposals from consideration. Of 163 proposals, 21 that did not propose a regulatory solution and therefore did not effectively answer question one of the change proposal template (Australian Building Codes Board 2012e) still resulted in changes to the building code. No advantage for change proposals submitted by particular participant types was identified. Outside of administrative and editorial changes submitted by the Australian Building Codes Board’s administrative office, between 21% and 50% of proposals submitted progress to changes in the published building code regardless of proponent type, and with little differentiation between government, industry or private citizens. Additionally, the technical quality of submissions, measured in relation to the size of the proposal and amount of supporting evidence, did not correlate to acceptance of proposed changes. Larger, scientifically supported submissions were not more successful at changing published outcomes.

Therefore the current administrative processes did not appear to exclude non-technical information nor ignore the views offered by non-expert participants. However, this analysis supports Yackee’s (2014) findings that the perception of a requirement for expertise by potential participants may dissuade them from participating in the first place. This may alter the types of participants active in the rulemaking process and thereby change the balance of information available to the Australian Building Codes Board.

The high number of instances where proposals effected changes to the building code, albeit with the language of the specific clauses drafted by experts elsewhere in the administrative process, suggests
information non-experts bring to the rulemaking process may have value in instigating regulatory change. When applied to current Australian Building Codes Board processes, the conclusions in this research imply that non-expert participants should be provided a participatory opportunity to identify problems without the technical hurdles evident in the current template. This finding is similar to Golden’s (1998) conclusion, that administrative agencies need to play a more active role in informing affected groups of the opportunities to participate and comment, and is significant when considered in relation to the absence of public participation from current processes in both the U.S and Australia.

6.2.5 Summary of Section 6.2
The rules and processes of the Australian Building Codes Board apply a direct influence on participation. But although industry and government experts in building and regulation participate, there was little evidence of participation by the general public and those in society who may be affected by the regulatory outcomes. This research found an absence of external participation in an administrative system which provided multiple and easily accessible opportunities for that participation, and suggests that other mechanisms or motivations may affect an actor’s decision to participate.

A bias towards the informed view of experts in building or regulation is evident by objectives in the Intergovernmental Agreement (Commonwealth of Australia 2012) which only seek input from external participants as sources of industry information or domain knowledge. This may be driven by policy considerations (Productivity Commission 2004), with the Productivity Commission suggesting that ‘the community is taken into account, but in a way that places greater emphasis on what fully informed community members would be prepared to pay for’ (2004, p. xxviii).

The level of participation may also be influenced by whether a participant believes they have a meaningful voice (Yackee 2014). Potential participants may be dissuaded from participating if they perceive they lack the technical expertise or information capacity to influence outcomes.

Combining participant information capacity (Yackee 2014) with this research’s finding that the Australian Building Codes Board primarily solicits participation by technical experts suggests an administrative process that may dissuade participation by the broader society who are not expert in the building or regulatory domain. Further, the Australian Building Codes Board’s position as an expert participant in an administrative process judging the submitted change proposals may contribute to a perception that domain expertise is a necessity for participation.
Although finding that non-experts may be dissuaded from participating, analysis found that where they do participate they are not ignored. While the language of rules in the specific drafting of clauses is set by experts through the administrative process, those experts often address problems identified by others. Identifying that the administrative process should provide non-technical pathways to inform the Australian Building Codes Board of problems is an important conclusion of this research.

The proposition that administrative rules implemented by a government agency to provide open access to rulemaking would directly affect participation is not supported. This research finds that other mechanisms or participative influences may be involved. The direct effect of administrative process on participation proposed by the spectrum in Figure 6-1 appears to be regulated by an indirect effect from a potential participant’s expertise. This may present as increased participation where the administrative agency encourages those with expertise, or decreased participation where non-experts may be dissuaded by a perceived lack of voice. Each mechanism may affect the balance in the nature of information available to decision makers in the rulemaking process. This aligns with the conclusion in Wagner’s participant centred model that ‘well-meaning administrative process requirements may actually be impeding, rather than encouraging, engagement from the full spectrum of affected participants’ (2013, p. 673).

6.3 Indirect Influence on Participation
Croley (2008) questioned who can participate and who actually shows up. The spectrum in Figure 6-1 is proposed as a response to the first part of Croley’s question, addressing who can participate. It describes the rules and processes implemented by the Australian Building Codes Board which directly affect the opportunities to participate in the development of Australia’s building code. In answering the second part of Croley’s question, who does show up, analysis of actual participation in building code development indicates that the expertise of potential participants may be a significant influence. This section of the discussion will bring together who can and who does participate, combining the direct and indirect influences into a single participatory landscape.

The analysis established that there does not appear to be a proportional relationship between the opportunities to participate described by the spectrum (Figure 6-1) and the expertise of participants. It is not the case that those without expertise are excluded and experts are encouraged or mandated to participate. It is contended that the indirect influence of participant expertise may be applied at each stage along the participatory spectrum (Figure 6-2).
The current practices of the Australian Building Codes Board provide examples of this indirect influence. For discreional participation, the administrative agency may discriminate which actors are allowed to participate based on the expertise they offer. This is seen in the discretion provided to the Australian Building Codes Board to select industry experts for membership of the Building Codes Committee. Expertise also influences situations when participation is invited or encouraged. Industry participants on the Board itself are selected based on them holding ‘the appropriate expertise to complement the capacity and skill set of the Board’ (Commonwealth of Australia 2012, p. 12).

The influence of expertise is also seen in the opportunity for open participation. Analysis found that 28 of 33 (84.8%) change proposals submitted by government participants recognised in the Intergovernmental Agreement resulted in building code changes, whereas only 13 of 46 (28.3%) proposals from other government areas effected change. All areas of government have open access, but their relationship to building regulation influences their success rate of their proposals. Participant expertise may also self-regulate public participation an open administrative system. In this case instead of administrative agency discrimination, potential participants may exclude themselves from participation based on their perceived voice or capability (Yackee 2014).

As participant expertise potentially influences participation levels across the entire spectrum, it is argued that the two concepts may be formed into a single model. The participatory spectrum in Figure 6-1 is combined with a new participant expertise axis to propose a landscape which models both influences on participation (Figure 6-3).
Figure 6-3: Proposed Participatory Landscape

Combining the participatory spectrum and effect of participant expertise into a single representation of influences on participation. Source: Author

The horizontal axis in Figure 6-3 represents the direct effect of mechanistic administrative processes as a spectrum from exclusion to mandatory participation. The vertical axis represents the indirect influence of participant expertise as a continuum from those with no information capacity in the domain to those with specific expertise. These two axis represent a participatory landscape on which the individual types of participant can be located. For example a legislated requirement for a building expert to participate would locate in the upper right. A non-expert homeowner, while affected by the regulatory outcomes but not participating in the process, may be located in the lower left.

At a theoretical level, this model landscape combines the context of Croley’s (2008) administrative process theory, where the condition to encouraging participation is reflected in the rules and processes, with Yackee’s (2014) participant voice model, where expertise is a predictor of participation levels.
6.3.1 Four Quadrants
As an inductive study the resultant model, in this case the proposed participatory landscape, is developed from the analysis and findings of the research process. Although the model was not tested as it would in deductive methodologies, the next section considers its implications in context of the Australian Building Codes Board’s processes. This is approached by simplifying the landscape into four quadrants (Figure 6-4).

![Figure 6-4: Four Quadrants of Participatory Landscape](image)

Simplification of the Landscape from Figure 6-3 into four quadrants representing types of participation in the administrative process. Source: Author

6.3.1.1 Dominant Experts Quadrant
The top right quadrant represents expert participants whose participation in rulemaking is encouraged or mandated. Membership of the Building Codes Committee or Australian Building Codes Board would be positioned in this quadrant, where the administrative agency encourages experts who can best inform its decision making. Analysis in this research found this group constitutes the dominant quadrant in rulemaking for Australia’s building code.
6.3.1.2 Frustrated Quadrant

Rulemaking is an important forum for industry to impact regulatory outcomes (Furlong & Kerwin 2005). Where the demand for change is high but a group’s influence on change is obscured, they will be frustrated (Rein 1983). The top left frustrated quadrant represents situations when domain experts are excluded or not provided with open opportunities for participation.

Rein (1983) explains that if excluded, industry associations or professional bodies would find other influence pathways. The change proposal process analysed in this research would represent one such pathway, but the few repeated proposals from industry groups not otherwise represented in the administrative process suggest an absence of frustration. Analysis found only two instances where an industry group not represented on the Building Codes Committee submitted more than one proposal. By contrast, industry groups who participate on that committee generated 61 proposals. Considering the importance of participation to interest groups (Furlong & Kerwin 2005), the absence of industry’s attempts to influence regulation by submitting change proposals suggests it is not dissatisfied with current access to rulemaking or its influence over resultant regulatory outcomes. Based on the analysis of submitted change proposals there is no evidence of this frustrated quadrant in the current processes of the Australian Building Codes Board.

6.3.1.3 Excluded, Unaware or Satisfied Quadrant

The bottom left quadrant represents potential participants who are absent from rulemaking. It may be difficult to characterise this quadrant, requiring an exploration of the reasons for their absence. The horizontal axis in this quadrant includes administrative processes which exclude participants, as well as those which provide open and discretionary participation. The analysis found that the general public, as non-experts who do have open access to the administrative system, are absent from rulemaking. Prior U.S. rulemaking studies have established that this absence may be due to unawareness of the opportunity to participate (Daley 2012; Rinfret & Furlong 2012) or a satisfaction with the current situation (Furlong 1997). Therefore, this lower left quadrant may include non-experts who are excluded by administrative rules, but may also include actors who have access but are absent for other reasons. Although this research did not specifically attempt to measure the reasons for this absence, the analysis has provided some indicators as to the cause.

The absence of participation may suggest a level of satisfaction with the current building code. The literature highlights that access to rulemaking is important to interest groups (Kamieniecki 2006b; Rinfret & Furlong 2012) where over 81% report using these processes to impact decisions (Furlong & Kerwin 2005). Stigler’s (1971) economic theory explains that actors will participate when regulatory returns are greater than the cost of participation. The administrative processes of the Australian
Building Codes Board provide open internet access to submit change proposals so the financial burden on proponents is small. Accordingly, Stigler’s (1971) supply and demand hurdle is low, which suggests participation would be worthwhile for only modest regulatory returns. Therefore if participation is important to those affected by regulatory outcomes, and there are low cost hurdles to regulatory access, then one explanation for the low participation rates observed may be satisfaction with the current building code.

The analysis also suggests the general public participate to address problems which affect them directly rather than to seek general regulatory change. Of the nine proposals initiated by the general public, this study found that each was generated independently, with no proponent submitting more than one proposal over the four-year study period. This absence of repeat submissions suggests general public participation looks to redress specific regulatory issues rather than the general community representing societal views towards overall building regulation requirements. This view aligns with Croley’s observation that groups participate in rulemaking not to achieve change, but to seek ‘less of what they do not want’ (2008, pp. 132-3).

While some of the U.S. literature measures the balance between industry, interest groups and public participation in rulemaking (Furlong 1997; Furlong & Kerwin 2005; Golden 1998), outside of Yackee’s (2014) research into participant voice, there is little analysis of the motivation to participate in rulemaking. This research has contributed to the measurement of actual participation but did not evaluate the motivation of individual participants. This discussion has identified some suggested explanations for the absent quadrant, but it is not presented as an exhaustive list. Recognising the need for further research into participant motivation this thesis does not attempt to further clarify this quadrant. Its title remains broad, encompassing those actors who may be excluded, unaware or satisfied, and an invitation for further research.

### 6.3.1.4 Societal Quadrant

The bottom right quadrant would represent the situation where administrative processes mandate or encourage participation by those who are not expert in the regulatory domain. The current Intergovernmental Agreement (Commonwealth of Australia 2012) does not provide these pathways for recognition of non-experts, and this research indicates participation in this quadrant is influenced by Yackee’s (2014) concept of information capacity. This raises a question of whether this quadrant would ever exist in practice. Why would an administrative agency choose to mandate or encourage participation by those it deems to be inexpert in the regulated domain?

According to the Intergovernmental Agreement (Commonwealth of Australia 2012) the Australian Building Codes Board draws its view of societal expectations from the strategic priorities set by the
Building Ministers Forum, which aligns with a policy position that community expectations may not deliver regulatory outcomes of greatest net benefit to the Nation (Productivity Commission 2004). Reflecting this position, the processes of the Australian Building Codes Board analysed in this research focus on participation by informed actors.

This narrow focus does not align with the participatory and trust aspirations evident in rulemaking literature and may indicate a shortcoming in current practices. Pidgeon (1998) considers participation in the decision making process to be a widening of the expertise obtained, finding that ‘extending the peer community can be expected to offer a far better understanding of the problems of risk assessment and management than by conventional analysis alone’ (1998, p. 13). The literature review also identified the aspiration by governments to involve the general public in the development of regulation (Bingham, Nabatchi & O’Leary 2005; Daley 2012) with a view that participant involvement may elicit the trust of those affected (Rein 1983; Sjoberg 2001). Gaining trust is a democratic concern in processes where non-elected administrators make rules outside of legislative process (Bingham, Nabatchi & O’Leary 2005; Furlong & Kerwin 2005; Stewart 1975). Therefore, although this quadrant is not evident in the current processes of the Australian Building Codes Board, theoretical scholars highlight its importance.

The findings of this research imply that the societal quadrant in the participatory model may provide information which is valuable to rulemaking agencies. A reliance on domain experts aligns with the recommendations of the Productivity Commission (2004) and Croley’s call for rulemaking to include those who will ‘most affect the shape of regulatory outcomes’ (Croley 2008, p. 12). However, when considering participants as information sources (Breyer 1982), experts represent only one type of information and may not represent the views of those affected by regulatory outcomes (Rein 1983), or those asked to trust those outcomes (Sjoberg 2001). In relation to building regulation, ‘those affected’ would include all of society (Inter Jurisdictional Regulatory Collaboration Committee 2010). Therefore including the societal quadrant in the landscape model acknowledges the concept of diverse information, the difficulty in sourcing this information (Slovic 1999; Slovic et al. 2004) and the need for administrative agencies to consider the mechanisms by which those sources can be included in participatory processes.

6.3.2 Summary of Section 6.3
Discussion in this section continued to build on Croley’s question differentiating between those who can and those who actually do participate in rulemaking. Analysis of the administrative process which sets Australia’s building code found its rules and practices may directly and indirectly affect the level of participation. Mechanistic aspects of the administrative rules and processes establish
who can participate, and the actual or perceived expertise of potential participants indirectly influences who actually does participate in practice.

The research findings were developed into a model which combined direct and indirect influences into a participatory landscape (Figure 6-4). This provides a new picture of participation in rulemaking which acknowledges the complex influences of processes and participant expertise. Different types of participants are located on the four quadrants in the model, summarised as frustrated, dominant, excluded and societal.

The proposed participatory landscape extends Croley’s (2008) condition to encourage participation from a binary measure of administrative process, to a complex evaluation of the influences on rulemaking actors in practice. Implementing mechanistic processes to allow participation, without considering the sources of information, types of participants, and the influence of processes on those participants may not meet Croley’s (2008) condition to encourage participation in rulemaking.

6.4 Participatory Landscape and Policy Objectives

In Chapter Five, this thesis analysed the outcomes from current practice in relation to three key objectives set for the Australian Building Codes Board by its Intergovernmental Agreement (Commonwealth of Australia 2012). This section discusses that analysis in relation to the four quadrants in the participatory landscape model (Figure 6-4) and develops recommendations which apply the findings from this research into Australian practice.

6.4.1 Apply a Rigorously Tested Rationale for Regulation

Current Australian Building Codes Board practices demonstrated an administrative process with the flexibility and discretion to seek detailed analysis when formulating regulatory outcomes. However the analysis identified a predominance of referrals to technical fora, notably through the dominant quadrant. Of 192 change proposals only a single instance is found where a proposal was referred to obtain more information with respect to policy. The Intergovernmental Agreement requires ‘a rigorously tested rational for regulation’ (Commonwealth of Australia 2012, p. 8). Is this rigour applied where proposals are only analysed by domain experts, without also measuring them against societal and policy views?

An argument could be made that the public comment process represents a form of referral, and providing access to that process demonstrates a tested rationale. However, observed participation rates of less than one public comment per building code change suggests this pathway may fall into the excluded or unaware quadrant, and therefore does not provide the rigorous analysis suggested by the Intergovernmental Agreement. Further, Australian analysis appears to mirror U.S. findings
that public comment occurs after the language of the rule is set (Rinfret & Cook 2013), and submitted comments only result in minor concessions in proposed rules (Golden 1998). Societal viewpoints are required at earlier stages when the agenda for change (Yackee & Yackee 2012) and language of rules is developed (Rinfret & Cook 2013). In setting future administrative processes, it is recommended the sources of information providing societal needs and expectations are considered.

This recommendation for societal input may conflict with the Australian Productivity Commission view to remove community expectations from the mission of the Australian Building Codes Board, and instead focus on efficient regulation that ‘fully informed community members’ would be prepared to pay for (Productivity Commission 2004, p. 36). In response, it is proposed that the dominant domain expert quadrant and significant absence of public participation found in this research suggest this failure to encourage participation from general society, and focus on efficiency may have gone too far. The absence of information which represents societal expectations may compromise the objective for rigorous testing of regulation. It is contended that a significant absence of societal views was not predicted by the Productivity Commission’s reduced focus on community. This is evident in its stated intent to ‘not preclude community input’ but take it into account in a way that makes regulatory ‘choices more realistic and cognisant of resource constraints’ (Productivity Commission 2004, p. 36).

The administrative process could introduce information on societal expectations through a number of pathways including extending participation on existing fora such as the Building Codes Committee and Board, or by creation of a new forum for community participation. The findings of this research indicate that access to information representing societal views may also be increased by removing the indirect influences which may be dissuading general public participation in the current proposal for change process. Each option requires the Australian Building Codes Board to consider how to source information from the lower quadrants of the participatory landscape and better encourage participation by actors currently in the excluded and absent quadrant.

6.4.2 Administrative System Should Deliver a Minimum Level of Regulation
Counter to concerns that societal input may lead to aspirational best practice outcomes (Banks 2006), increased participation did not appear to negatively impact the Intergovernmental Agreement objective to ‘establish codes and standards that are the minimum necessary’ (Commonwealth of Australia 2012, p. 8).

The analysis indicated that current processes achieved balance between drivers of increased and decreased stringency in building code requirements. Of 78 change proposals calling for changes in regulatory stringency, 75 (96%) were generated by proponents external to the current processes of
the Australian Building Codes Board. Administrative processes filtered these 75 proposals to eight published changes. Their effect on building requirements was split evenly between four increasing and four decreasing stringency.

The current practices to review proposals using participants from the Building Codes Committee and Board appeared to contribute to the stringency balance observed in regulatory outcomes. However, membership of these fora is drawn from the dominant quadrant of industry experts invited or encouraged to participate and excludes non-expert participants. Rein (1983) presents an argument that achieving consensus may drive regulation from minimum requirements to best practice. If the Australian Building Codes Board were to extend participation into the societal quadrant, would achieving consensus amongst that broader range of participants then fail the objective to achieve minimum outcomes? To answer this question requires a method to establish ‘minimum’.

The Intergovernmental Agreement (Commonwealth of Australia 2012) is silent on the process by which minimum is measured. Is it a minimum acceptable level according to the views of informed experts, or minimum levels set against societal expectations? It is argued that one must be expressed in relation to the other, which leaves a dilemma for rule makers. Inviting participation from the non-expert quadrants may drive regulation above minimum levels. But without the societal quadrant present, how do administrative agencies define what represents minimum while ‘having regard to societal needs and expectations’ (Commonwealth of Australia 2012, p. 8).

At an idealised level this dilemma may already be solved by the current building code administrative processes studied in this research. Open participation for societal views during the initiation of change is then informed by subsequent experts through later advisory and decision making fora. This matches the policy position expressed by the Productivity Commission (Productivity Commission 2004) requiring the rulemaking process to account for community expectations but in a way that an informed community would pay for, and aligned with cost benefit constraints.

When comparing different drivers on building code stringency, this research did not attempt to judge which participant’s views best reflect public interested outcomes. While analysis distinguished between the rulemaking stages of proposal submission, advisory committee review and decision making, it did not assume that participants initiating change proposals represented societal views, and experts active elsewhere in the administrative process did not. An equally valid assumption could be that change initiation is biased by influence from self-serving interest groups, as found by Golden (1998) and Furlong (1997), with later participation stages applying societal filters to that initial bias. The analysis did not test these assumptions, and both effects may manifest in current
practice. Reflecting on the efforts of prior research to measure influences on rulemaking outcomes without clear agreement (Rinfret & Cook 2014b) it is argued that the administrative agency may not easily identify which actors are providing which type of information.

In summarising this discussion, the current process with multiple participation stages may be able to deliver minimum regulatory outcomes which include both societal and expert views. However, as the administrative agency cannot readily identify which participants represent views aligning with public interested outcomes, the process should not be implemented from a perspective of one type of participant judging or approving the submissions of others. It is recommended that the multiple participation stages are implemented in a way which encourages participation from all quadrants. This would provide the decision makers in the rulemaking process with balanced information and align with Pidgeon’s (1998) view to extend the peer community and balance scientific views with societal values.

A final aspect of the objective for minimum regulation relates to the prescriptive questions in the change proposal template (Australian Building Codes Board 2012e). Proponents are not asked to clarify whether their proposed change seeks to increase or decrease the stringency of the building code. Given the template is a key document to inform participants, the exclusion of this objective suggests a mismatch between process and desired outcomes.

6.4.3 Outcomes Which Reduce Reliance on Regulation
The Australian Building Codes Board has an objective to reduce reliance on regulation by exploring alternative mechanisms to achieve its outcomes (Commonwealth of Australia 2012). This objective was not evident in current administrative practice and analysis found only one instance where non-regulatory, informative pathways were explored as an alternative to regulation.

The nature of this objective suggests it may be more relevant to the internal processes of the administrative agency rather than participation levels. However, analysis in this thesis introduced Maslow’s (1966) view that a person would tend to use the tools at their disposal. As the dominant quadrant in current practice represents experts in building and regulation, it may be expected that resultant outcomes would reflect that expertise and appear as regulatory solutions driven by prescriptive technical content in the building code. This predominance for regulatory outcomes is evident in the analysis in Chapter Five. Would encouraging increased participation by other quadrants, the general public and non-experts increase the use of alternative non-regulatory solutions?
Extending participation by encouraging actors from the excluded quadrant into the societal quadrant may not reduce reliance on regulation unless those participants also have an awareness of the non-regulatory options available to rulemaking. The proposal for change template (Australian Building Codes Board 2012e), and the guidelines for its preparation (Australian Building Codes Board 2016) identify that proposals should address both regulatory and non-regulatory options and require proponents to detail how these have been considered and on what grounds they were excluded. But the documentation made available to participants does not provide guidance on what constitutes an alternative to regulation. It is recommended that the template and guidelines include informative material detailing the range of non-regulatory alternatives such as education, codes of conduct, technical standards, market drivers and informative handbooks (Office of Best Practice Regulation 2007), and demonstrations of the use of such material in controlling behaviours in the building industry.

6.4.4 Summary of Section 6.4
The participation from each quadrant in the participatory landscape may affect how the Australian Building Codes Board achieves the objectives set by its Intergovernmental Agreement. The dominance of expert participants and absence of societal quadrant may affect the level of analysis, stringency of published regulation and the exploration of non-regulatory alternatives.

The absence of societal input from the initiation, review and public comment stages of rulemaking leaves a question of whether current processes rigorously test the need for regulation. Additionally, this absence of participation leaves a question about how a rulemaking agency achieves a minimum level of regulation without understanding the societal expectations of that minimum. While noting its aim to reduce reliance on community expectations (Productivity Commission 2004), the findings from this research suggest the Australian Building Codes Board has gone too far in its reliance on the views or expert participants. The absence of the societal quadrant may compromise both rigour and minimum outcomes.

Current practices do not appear to explore non-regulatory options. Experts have a natural motivation towards the technically prescriptive solutions that regulation offers. But introducing societal views without providing participants information and capability to better explore alternatives to regulation may not achieve this objective. This may be overcome by encouraging participation from the excluded or absent quadrant, and supporting those participants with information providing options for non-regulatory solutions such as the publication of guidelines, education materials or industry led initiatives.
The recommendations for the Australian Building Codes Board developed in this section discussed the processes used to develop the building code and how they impact its objectives. This focused on the processes to source information from participating actors for use by the administrative agency. However Kerwin (2003) identifies that the process of seeking information is initiated by the administrative agency first sharing information. This research has concluded that the information published by the Australian Building Codes Board to invite participants may indirectly influence the level of participation. The next section develops recommendations to address that indirect influence.

6.5 Negative Influences of the Proposal for Change Process

This research identified a potential indirect influence of expertise on participation in rulemaking. The language used in documentation published by the Australian Building Codes Board represents one indirect influence which may affect participation, particularly by those not expert in the building domain.

Two information flows are identified between administrative agencies and rulemaking participants. One advises the opportunity to participate (West 2009) and the other is the information provided by participants (Kerwin 2003). These two flows are related and it is not possible to source information from potential participants without the administrative agency first sharing information of their rulemaking intent (Kerwin 2003). The language used by the Australian Building Codes Board when sharing information may establish a potential participant’s perception of their information capacity, voice and ability to influence regulatory outcomes (Yackee 2014).

Review of the proposal for change template and supporting guidelines (Australian Building Codes Board 2012e, 2016) identified instances of language which may influence perceptions and potentially dissuade participation. This chapter closes by discussing possible negative influences in current documents, then develop recommendations that may guide the Australian Building Codes Board in setting future processes.

6.5.1 Perception of Language

The overall language in the change proposal documentation establishes this as a technical process. The guideline document states the proposal for change process ‘is used by the Australian Building Codes Board to consider technical proposals to change the National Construction Code’ (Australian Building Codes Board 2016, p. 1), implying the process is not appropriate for non-technical submissions. The proponent is further guided to technical aspects with the advice to ‘include research papers, journal articles to support your position’ (Australian Building Codes Board 2016, p.
2), suggesting proposals require the support of formal scientific evidence in order to influence outcomes.

In practice, submitting supporting evidence did not correlate to success changing the building code. Of 78 proposals which changed the building code only 13 were submitted with attachments. This finding may support Croley’s (2008) view that information is useful regardless of its source and suggests submissions do not need to be limited to those which are technical to provide new and valuable information to the rulemaking agency.

The template’s language suggests a process in which proponents are required to present a regulatory solution which will then be judged by experts for acceptability, rather than a process for gathering information. This establishes a potential hurdle for those not expert in building or drafting regulation. The first question prompts proponents to identify the specific clauses to be changed and provide a draft of the proposed changes. The guidelines advise that by including ‘wording to go into the National Construction Code and the reasons behind your wording, you will help those reviewing your proposal to understand what is intended’ (Australian Building Codes Board 2016, p. 2), setting a perception that the proposal will be reviewed and judged by others. This perception is reinforced by the sentence ‘to ensure your proposal is given the best opportunity to succeed’ (Australian Building Codes Board 2016, p. 2) which shifts the implication of this process from one of information gathering to one of the administrative agency assessing the success of proposals in competition against the status quo.

In addition to technical expertise, questions in the template may also set a perception to demonstrate industry knowledge. Proponents are asked to ‘identify all affected parties [manufacturers or installers, consumers, designers, regulators] as a first step in understanding what the likely impacts will be’ (Australian Building Codes Board 2016, p. 3). The next question them prompts for detail as to the extent each party will be affected along with some evidence of net benefit between the positive and negative impacts. The last question in the template then asks for evidence of consultation with affected parties, the nature of discussions and the extent of their support. Industry knowledge is then further implied through a need to consider the ‘effects on competition’ (Australian Building Codes Board 2016, p. 3) identifying whether the change will affect market balance.

It is recommended that the public facing documentation published by the Australian Building Codes Board to communicate the opportunity to participate should be redrafted with an aim to remove implied expertise requirements and technical barriers to participation. The next section explores
whether this is best achieved by providing a second non-technical pathway rather than modifying current technically-focused templates.

6.5.2 Multiple Information Pathways
The language in the current proposal template (Australian Building Codes Board 2012e) reflects its role to solicit drafted solutions for building code change. Proponents are required to firstly nominate the exact clauses targeted by the proposal, then draft those clauses for inclusion into a revised building code. But different types of information are sourced from differing types of participants (Breyer 1982). When encouraging participation, it is suggested that administrative processes reflect the purposes for which that participation is sought, whether to identify problems in the building code, solicit ready drafted solutions, or invite information to improve the efficacy of decision making.

In considering the type of information required for management of the Australian building code, the single proposal for change pathway may not represent the best administrative process to source broad-based input. When answering Croley’s (2008) question to encourage participation by those who will most shape regulatory outcomes, this research distinguished encouragement of those suited to identify regulatory problems from those best suited to drafting the regulatory response to identified problems. This distinction between the roles of participants suggests an administrative process may better encourage the lower quadrants of the participatory landscape (Figure 6-3) by offering two pathways.

In practice, the change proposal template already generates submissions which separate problem identification from regulatory drafting. Analysis found that notwithstanding the prescriptive requirement for proponents to draft clauses to explain their intended changes, 77 of 192 proposals did not do so, only identifying a problem with the building code in their submission. Further, 60 of 69 proposals were revised from the proponent’s submitted drafting, indicating a tendency for clauses in the published building code to be drafted by experts within the forum. Therefore, although a single technically focused proposal for change template exists in principle, the analysis indicates two pathways are evident in practice. One for experts to draft changes and the other for non-experts to identify problems with detailed drafting prepared through later stages of rulemaking.

It is recommended that the Australian Building Codes Board modify the change process to either two proposal templates, or a single template providing multiple pathways. Splitting the participatory pathways based on whether proponents choose to identify building code problems or propose drafted solutions would maintain current access for expert participants in the dominant quadrant while better encouraging those in the excluded or absent quadrant to share information.
6.5.3 Summary of Section 6.5
The Australian Building Codes Board formalise the initiation of rulemaking and setting the regulatory agenda by providing public access to the proposal for change process. However, the analysis found that this open access did not translate to broad participation by the general public or encourage significant information representing wider societal views. This research found that participation rates in building code processes may be influenced by the focus of administrative systems towards those with domain expertise. The research findings suggest the prescriptive nature and language used in the proposal for change template may dissuade participation by those not expert in building. Modifying the current proposal for change process to provide pathways for expert drafting of solutions along with pathways for non-experts to present information or identify problems, may offset the negative influences on participation identified.

6.6 Limitations on the Scope of Recommendations
The research is predicated on calls for participation in rulemaking through the academic literature (Bingham, Nabatchi & O’Leary 2005; Daley 2012), as well as similar aspirations for collaborative rulemaking by the Australian Government (Australian National Audit Office 2014; Office of Best Practice Regulation 2007), and also by specific recitals in the Intergovernmental Agreement enabling Australia’s national building code (Commonwealth of Australia 2012). The research did not attempt to provide a value judgement on participation, nor judge whether that participation may lead to regulatory outcomes in the public interest. The focus throughout the research remained on its principle aim to understand how administrative processes effect participation.

This study is limited to evaluating the effects of administrative processes on actor participation in rulemaking. The evaluation was undertaken through the theoretical lens of Croley’s (2008) administrative process theory, and that theory’s condition to encourage participation. This theory proposes six other conditions that constitute an environment of public interested regulation (Table 2-3). These relate to administrative, legislative and judicial conditions not relevant to participative factors in rulemaking, and were not studied.

The evaluation and analysis drew upon information sources available through the documented decision making processes of the Australian Building Codes Board. The research did not include qualitative analysis of motivation for individual actors to participate, but drew on Yackee’s (2014) research surveying individuals to gain insight as to their perception of voice in administrative process.

This research was approached using an inductive methodology, applying open coding to building code changes over four years. In this inductive approach, the participatory landscape (Figure 6-4)
was developed from the analysis, rather than being theorised and tested by the analysis (as it would in deductive research). Therefore, this research has not tested the proposed landscape from a deductive methodology, but sets this as a future research agenda.

In differentiating U.S. and Australian regulatory environments, Coombs (2002) notes the Australian environment emphasises the legislative program rather than administrative rulemaking by the executive. The practices of the Australian Building Codes Board were selected for study based on the alignment between the decision processes set for that agency by its Intergovernmental Agreement (Commonwealth of Australia 2012), and those of U.S rulemaking under the Administrative Procedure Act (1946). However, while intergovernmental agreements appear in most areas of Australian government ‘the purposes of agreements and thus the mechanisms employed in them are so varied as to defy neat categorisation’ (Saunders 2005, p. 297). Therefore, while research findings are applied to the Australian Building Codes Board through recommendations relating to the proposal for change process, their applicability to general Australian regulation setting is subject to further research.

6.7 Summary of Chapter Six

Discussion through this chapter directly addressed the aim of this thesis, finding that the level of actor participation is influenced by the administrative processes throughout different stages of rulemaking within an Australian government agency. The direct effect of rules and processes were modelled as a participatory spectrum which influences who can participate. However the research also found that providing opportunities for participation does not necessarily translate to active participation. By differentiating between who can and who does participate, this thesis concludes that actor participation is also indirectly influenced by the actions of the administrative agency.

Analysis of the current practices of the Australian Building Codes Board found that participant expertise represents an example of indirect influence. By overlaying expertise on the participatory spectrum, a model participatory landscape was developed. This model was applied to identify alignment between the current practices and policy objectives of the Australian Building Codes Board. Findings from the application of the landscape were then developed into recommendations against current practice.

Collectively, this new model and its application represent the contribution to theory and current practice made by this thesis. These contributions are discussed in detail through the conclusion in the next chapter.
Chapter 7. Conclusion

7.1 Chapter Outline

Rulemaking is important to society. It is widely used by governments to set product safety, electrical and building codes to which people entrust their lives (Harter 1982). These codes are enacted into regulation, and increasing the stringency of their requirements may increase the cost borne by the community in order to comply (Productivity Commission 2006b). This research evaluated the administrative processes used by a government agency in setting the content of the Australian building code, a legislated document which affects the lives of every Australian.

Rulemaking is a subset of regulatory scholarship (Morgan & Yeung 2007) concerning the activities of executive government when establishing enforceable outcomes outside of legislative or judicial process (Rinfret & Furlong 2012). When setting the content of the building code, executive government is required to balance societal expectations with engineering and scientific input to deliver an appropriate level of safety with net benefit to the community (Commonwealth of Australia 2012). The administrative processes to achieve that balance, and the influence of those processes on participation by actors able to provide information representing both technical expertise and societal expectations, set the agenda for this thesis.

7.1.1 Structure of this Chapter

This chapter concludes the thesis, summarising key findings and contributions. It opens by presenting a conclusion in relation to the research aim, then explores key findings on participatory influences. Theoretical findings are then considered against current processes in Australia, summarising their implications in practice.

The contributions made by this research are clarified under headings of rulemaking research, theory, and practice. The chapter closes by outlining the applicability of the findings to other rulemaking agencies and by proposing an agenda for future research.

7.2 Motivation, Aim and Key Conclusion

This thesis commenced by looking at participation in the process of setting regulation. It was motivated by an interest in the opportunities for open participation offered by the Australian Building Codes Board and the way it appeared to embody democratic ideals into the operation of executive government. The ability for anyone to initiate a revision to the building code, together with opportunities to review and contribute feedback on proposed changes before publication, suggested that the general public could both influence the rulemaking agenda and comment on the changes proposed by others.
However, observations made during the early analysis stage of this research indicated that apart from actors directly referenced in the Intergovernmental Agreement (Commonwealth of Australia 2012) there were few other participants in setting Australia’s building code. Members of the general public only submitted nine change proposals over four years, with only two of those resulting in alteration to the published code. At the public comment stage, there were just 24 submissions made by parties unrelated to the Australian Building Codes Board, and these rarely altered the drafted publication.

This mismatch between the opportunity to participate in principle and the paucity of participation in practice framed the research problem for this thesis: to look beyond the mechanistic aspects of participation in order to understand the influence of administrative processes on potential actors throughout all stages of rulemaking. To do so, an institutionalist theoretical approach was used to study the internal organisational processes of the Australian Building Codes Board in order to identify who participates (West 2005) and to develop an understanding of the ‘dynamics and impact of interest group involvement’ (Furlong & Kerwin 2005, p. 354). Applying an Australian context to the predominantly U.S. based scholarship on regulation (Morgan & Yeung 2007), the research aim was to apply case study analysis to evaluate the influence of administrative processes on actor participation across all stages of rulemaking by an Australian government agency.

The key conclusion from this research aim is that participation was influenced by both direct and indirect pathways of administrative process. The direct pathway is the formal rules and processes employed by the rulemaking agency. These are articulated in a participatory spectrum covering exclusion through to mandated participation. The indirect pathway is the influence of those rules on potential participants. In the context of Australia’s building code this influence manifested as an implied necessity for technical or regulatory expertise, which potentially discourages participation.

### 7.3 Participation is Influenced by Direct and Indirect Factors

The study was approached from an initial proposition that the rules and processes enacted by an administrative agency, particularly at the pre-proposal stages of rulemaking, may directly and indirectly influence participation. The direct administrative processes provide opportunities for open participation at pre-proposal stages. As the general public largely failed to take up those opportunities the research concluded that their absence may also be influenced by indirect factors.

#### 7.3.1 Absence of Correlation between Process and Participation

The participative opportunities provided by the administrative processes of the Australian Building Codes Board did not correlate with participation in practice. This research found that allowing access to rulemaking did not mean that potential participants would take advantage of that access.
The literature review identified conflicting views on this question. Institutional theory contends that the organisational structures and processes will influence the role of actors and shape regulatory outcomes (Baldwin, Cave & Lodge 2012; Carrigan & Coglianese 2011). Some rulemaking scholars argue that where opportunity exists, groups will participate (Croley 1998; Golden 1998; Rinfret & Cook 2014a), while others suggest that the right to participate does not mean groups will exercise that right (Daley 2012; Stewart 1975; Yackee 2014). This thesis found that in Australia, providing opportunities to participate in building code development does not lead to a high level of participation in the process, which supports existing views in the literature that providing access to rulemaking does not ensure participation (Daley 2012; Kerwin 2003; Yackee 2014). The low level of participation has implications for the types of information available to decision makers in the administrative agency and may affect the balance between societal expectations and expert views.

7.3.2 Findings at Pre-Proposal Stage
The analysis also identified that the level of public participation did not differ when the opportunity to participate was extended from the later ‘notice and comment’ stages to the earlier pre-proposal stages of rulemaking. An absence of data covering the early stages in U.S. rulemaking creates a challenge for researchers studying the relationship between administrative agencies and participants (Rinfret & Furlong 2012). The pre-proposal stages are recognised as important but have not been studied (West 2005). The processes of the Australian Building Codes Board enabled study of this rule initiation stage when proponents submit proposals to change the building code. The analysis found that the participation rate by the general public at this pre-proposal stage was similar to that measured in U.S. studies during later public comment stages. The open opportunity to participate in this stage did not appear to change the level of participation by the general public. The similar participation rates observed at rule initiation and public comment suggest Rinfret and Furlong’s (2012) speculation that findings may differ between stages of rulemaking is not supported in Australian practice.

7.3.3 Direct Influences on Participation
While the rules and processes of the administrative agency can provide a direct mechanistic influence over participation by excluding access or mandating consultation, this study identified intermediate positions between these extremes. The analysis identified differences between allowing participation, as provided by the open change proposal or ‘notice and comment’ processes, and inviting or encouraging participation, as demonstrated by the discretionary participation on the technical Building Codes Committee. An outcome of this research was to develop these observations to incorporate the condition to encourage participation, identified in Croley’s (2008) administrative process theory, along a participatory spectrum. In doing so, this researcher
recognises that the encouragement of participation is not a binary measure. The rules and processes employed by administrative agencies may influence not only the level of encouragement, but the range of actors who may be encouraged.

7.4 Current Process is not a Practical Implementation of Participation

The rules and processes of the Australian Building Codes Board allow participation across the proposed participatory spectrum. They allow open participation with opportunities for access available to all potential regulatory actors, but also demonstrate aspects of discretion, invitation and encouragement. A proposition outlined in Chapter One of this research stated that the administrative processes used in the development and revision of the Australian building code demonstrate a practical implementation of participation in rulemaking. The analysis and subsequent discussion found that based on the low level of general public participation, this proposition is not supported.

7.4.1 Indirect Influence of Participant Expertise

This research identified that the general public are not highly involved in setting Australia’s building code. While theorists suggest a low level of participation may occur if the public are not receiving regulatory returns which exceed their effort (Stigler 1971; Wagner 2013), the review of administrative processes in this study found the effort to participate is low both in accessibility and financial cost.

The public were found to participate when the content of the building code impacted them directly and they sought specific regulatory outcomes. This suggests validity in Croley’s (2008) view that participants in regulation look not to promote change, but to remove undesirable parts. The few change proposals submitted by the general public were found to address problems directly affecting the proponent rather than seeking generalised changes. Stigler’s (1971) theory appears to hold true, and the public will participate when their return, solving a personalised problem, exceeds their effort.

This research concluded that domain expertise may represent another hurdle facing participants, increasing the effort to participate and thereby outweighing potential regulatory returns. To participate, the general public may perceive they need to either become expert in the domain or enrol industry experts to support and represent their cause. This perception is reinforced by the change proposal template (Australian Building Codes Board 2016) which requires the proponent to identify industry participants affected, and provide evidence of broad consultation. This research implies the effort to gain this expertise may exceed potential returns and therefore discourage participation.
7.4.2 A Model Combining Direct and Indirect Influences
The research finding that an absence of expertise may dissuade participation drew on Yackee’s (2014) research on participant voice. If participants perceive they lack the information capacity or expertise necessary for their voice to influence regulatory outcomes, they will be dissuaded from participating. Analysis of building code revisions concluded that the while the processes and rules allowed open participation, the language of documentation published by the Australian Building Codes Board set a perception that proponents should demonstrate technical or industry expertise and indicated that the adequacy of proposals will be judged by experts.

This indirect influence of participant expertise on actual participation rates translated the proposed participatory spectrum into a two-axis landscape. Integrating the condition to encourage participation established in Croley’s (2008) administrative process theory with the influence of information capacity from Yackee’s (2014) theory on participant voice represents a key contribution from this research. This model landscape presents a new theoretical lens which demonstrates direct and indirect mechanisms which may influence potential participants in rulemaking.

When applied to building code development, the model landscape categorised participants into four quadrants as dominant experts, frustrated experts, encouraged society and actors who are excluded or unaware. This model identifies the potential administrative process challenges when rulemaking agencies seek information on societal expectations. The research found evidence of these challenges in building code development.

7.4.3 Conflicts over Societal Views
The processes of the Australian Building Codes Board do not appear to balance the views of technical experts and societal expectations. The literature review identified general acceptance that decision making should be informed by a balance between expert and values based viewpoints (Pidgeon 1998; Rayner & Cantor 1987; Sjoberg 2001; Slovic et al. 2004; Sundlof 2000). Australian Government legislation mirrors this position (Legislative Instruments Act (Cth) 2003) encouraging participation by both domain experts and those parts of society who may be affected by rulemaking outcomes. Counter to this legislative ideal, the research findings indicate that executive government may not apply this ideal in practice.

The Australian Productivity Commission (Productivity Commission 2004) identified that community expectations may not deliver efficient regulatory outcomes, prompting them to recommend the removal of community expectations from the mission of the Australian Building Codes Board (Commonwealth of Australia 2012). This researcher contends that in complying with this recommendation, the Australian Building Codes Board may have gone too far and now indirectly
excludes societal expectations from the process. In administrative process theory, it is considered that shifting away from legislators towards administrative decision makers is a positive move towards those better placed to pursue public interest (Croley 2008), yet this is not evident in the agency studied in this research. Current practice predominantly resides in the dominant expert quadrant of the model landscape, with little evidence of balanced information from parts of society affected by the rulemaking outcomes.

7.4.4 Predominance of Information from Experts

The predominance of expert participation is seen in the role of the rulemaking agency itself. While pluralists suggest that the administrative agency should function as an independent arbiter of interest group views (Golden 1998), this research found the Australian Building Codes Board is active in the process as an expert participant in their own right. This participant role is evident in the Australian Building Codes Board application of its available discretion to pursue the objectives set for it in the Intergovernmental Agreement (Commonwealth of Australia 2012).

An administrative agency which adopts the role of expert participant can be beneficial to the rulemaking process. Administrative process theory distinguishes between ‘regulatory capture’ and ‘agency independence’ based on the agency demonstrating independence from the interests they seek to regulate (Croley 2008). This independence is evident in Australian practice with analysis finding no interest group dominated the four years of rulemaking studied. The expertise of the agency staff may be integral to this finding. Similar conclusions were reached in research on the U.S Securities Commission (Bingham, Nabatchi & O’Leary 2005) where its expertise allowed its independence from expert participants by members having the skills to identify where capture may occur.

However, an expert administrative agency may also bias the process towards other experts. The research found the Australian Building Codes Board, as an expert participant itself, directly and indirectly prefer expert information, with a result that participation is concentrated in the dominant expert quadrant of the landscape. The composition of the Building Codes Committee is at the discretion of the ABCB Office, with its membership drawn from government and industry participants who demonstrate expertise in building and construction. Regulatory outcomes were found to respond predominantly to the views of these experts, but rarely responded to the views received through public comment submissions.

The unbalanced influence which appears evident in Australian practice, is also a repeated criticism of U.S. rulemaking (Croley 1998; Rinfret & Cook 2014b; West 2005). But where U.S. research found a preference for business interests (Yackee & Yackee 2006) or formal interest groups (Furlong 1997),
Although it appeared that expert information is preferred, the analysis revealed it was not at the total exclusion of other sources. The change proposal template encourages proponents to include supporting evidence, research papers and journal articles, implying a need for expert technical justification. However, longer proposals and those with higher numbers of attachments did not correlate to success in changing the building code. The opposite was observed, with shorter proposals having a greater influence on published outcomes. Further, while only nine proposed changes were directly reflected in the published building code, the rulemaking process recognised and acted on problems identified in 60 other proposals.

The proposition that the administrative processes used in the development and revision of Australia’s building code demonstrate a practical implementation of participation in rulemaking was not supported. The research concludes that notwithstanding the Australian Government’s objective to involve those who may be affected by regulatory outcomes, the preference for expert information and encouragement of participants who may supply that type of information has led to the paucity of participation by the general public and those not expert in the building domain. This conclusion suggests implications for the current processes of the Australian Building Codes Board and its objectives to develop a building code which has ‘regard to societal needs and expectations’ (Commonwealth of Australia 2012, p. 8).

7.5 Implications of the Research Findings in Practice

This research aimed to evaluate the influence of administrative processes on actor participation across all stages of rulemaking by an Australian Government agency, through case study analysis of changes to building regulation from 2009-2013. The research has met its aim with a finding that the administrative processes of the Australian Building Codes Board apply both a direct influence, which establishes who can participate, and an indirect influence, reflected in who does participate. The indirect influences represented in the participatory landscape proposed in this thesis may have implications for the future practices of the Australian Building Codes Board. They may also be applicable to rulemaking by other administrative agencies, particularly where the regulatory domain relies on technical expertise.

The researcher asserts that not including community expectations in the mission of the Australian Building Codes Board, although aimed at delivering efficient regulatory outcomes, may have gone
too far and led to unanticipated outcomes. The general public are mostly absent from the process and the Intergovernmental Agreement does not provide a clear mandate for their participation. In the context of this administrative agency, the absence has implications for its ability to provide a rigorous test of proposed regulation and achieve minimum regulatory outcomes.

While findings from this research suggest that the paucity of public participation may be a disadvantage, it also acknowledges the Australian Productivity Commission’s (Productivity Commission 2004) assertion that processes dominated by an uninformed society may not deliver efficient regulatory outcomes. The implication for building code development is to enact administrative processes which can capture diverse views to set the rulemaking agenda, establish outcomes with regard to societal needs, but not result in aspirational or best practice regulation.

In applying this research in practice, two key recommendations for the Australian Building Codes Board were proposed. The first was to revise the change proposal process to provide parallel participation pathways. This involves retention of the current pathway, suited to participation by building and regulatory experts, and addition of an alternative which removes expertise barriers, allowing participants to identify problems without the hurdle of also solving those problems. In Croley’s (2008) terms, this means to implement an administrative process which allows participation by those who can best shape regulation as well as those who may be affected by the regulatory outcomes.

The second recommendation is to retain the Australian Building Codes Board current role as an expert participant in the administrative process. This role was found to offset the potential for domination by influence groups evident in U.S. rulemaking studies (Nixon et al. 2002). It serves a role in providing expert drafting where required and appears to moderate unchecked drivers towards aspirational or best practice regulatory outcomes.

Providing two pathways will continue to provide opportunities for participation by those domain experts while not discouraging participation by those without expertise who may be affected by regulatory outcomes. When coupled with the current processes for expert and administrative review, parallel participatory pathways may resolve the tension between the Productivity Commission’s (Productivity Commission 2004) call to remove community expectation, the Legislative Instrument Act’s (2003) call to include those affected, and the Intergovernmental Agreement’s (Commonwealth of Australia 2012) objective to deliver a minimum code with regard to societal expectations.
7.6 Contributions from this Research

Regulation has been the subject of longstanding academic study (Morgan & Yeung 2007) but the short twenty year body of research on rulemaking has left gaps in current knowledge (Furlong 1997; West 2005). This thesis responded to some of the knowledge gaps identified in prior rulemaking literature by evaluating a real world issue of setting regulation in the public interest. It has combined regulatory theories, U.S. empirical studies and Australian practice to extend understanding of the influences on participation in rulemaking. This section reviews the key contributions made by this thesis in the areas of research methodology, current theory and current practice.

7.6.1 Contribution to Rulemaking Research Methods

The design of this study has contributed a research methodology allowing study of all stages of rulemaking in the context of a single administrative agency. U.S. scholars acknowledged that participation and influence may happen outside the ‘notice and comment’ process (Wagner, Barnes & Peters 2011) and that ‘more research is clearly needed’ at other stages (Rinfret 2011, p. 242).

Current research is predominantly U.S. based (Morgan & Yeung 2007) and draws on processes set by the U.S. Administrative Procedure Act (1946) to examine participation during the ‘notice and comment’ stages of rulemaking. This research takes place after the language of the rule is set within the administrative agency (Kerwin 2003; Rinfret & Cook 2013). The absence of formal administrative processes during the pre-proposal stages in U.S. rulemaking (Rinfret & Cook 2014b; Yackee & Yackee 2012) results in a gap in information on participation in the internal agency processes, before the rule is published for public comment (Rinfret & Furlong 2012). This gap is identified as a black box (West 2009), with Nixon et al. (2002) suggesting the absence of visibility may generate a misleading view of interaction between participants and rule makers.

7.6.1.1 Study at Pre-Proposal Stages of Rulemaking

The need for a research method which allowed all stages of rulemaking to be evaluated (Yackee & Yackee 2012) was reflected in this study’s objective to analyse actor participation at all stages of the administrative process. The research met this objective by evaluating participation in the development of Australia’s building code from change initiation through to final publication.

In developing its methodology this research contributed a novel approach to analyse administrative process. Each change proposal submitted to the Australian Building Codes Board was traced through all stages of the rulemaking process, appending the deliberations, decisions and participant input as the proposal progressed through to a resultant outcome in the published building code. Documentation and analysis of this formal end-to-end process contributed new insight to the
initiation and pre-proposal stages of rulemaking previously shaded from U.S. scholars (Wagner, Barnes & Peters 2011; West 2009).

The thesis identified comparisons between administrative systems. Differences between U.S. and Australian administrative processes (Coombs 2002) raised questions of the comparability between rulemaking systems. Methodological development in this study found significant similarities in the participative processes of the U.S. Administrative Procedure Act (1946) and the Australian Building Codes Board’s Intergovernmental Agreement (Commonwealth of Australia 2012). This similarity justified comparisons and may allow the study’s findings to also contribute to U.S. rulemaking research. It also facilitates future research opportunities in other Australian administrative agencies whose rulemaking power is delegated through an Intergovernmental Agreement (Saunders 2005).

7.6.1.2 Rulemaking in the Context of a Single Domain

The domain context has implications for the analysis methods used (Kamieniecki 2006b; West 2005) and the application of findings in practice (West 2005). The methodology used in this study focused on rulemaking by a single administrative agency and contributes a unified dataset for future study. The value of rulemaking study without domain context is questioned (Croley 2008; Kerwin 2003; West 2005) and ‘analysis of official rulemaking records and surveys of interest groups’ is rare (Kerwin 2003, p. 178). This research responded to these limitations by adopting West’s methodology for the researcher to become ‘immersed in a particular rule or small sample of rules’ (2005, p. 662).

The processes of the Australian Building Codes Board provided administrative records from rule initiation to subsequent decision making and public review stages. By analysis of these internal documents, this research generated a direct association between the changes proposed by rulemaking participants and subsequent changes published in Australia’s building code. This contributed a unified dataset which traced 192 proposed changes through a stable administrative process over a four year period.

This dataset was analysed and coded for key attributes related to the research aims in this thesis. This coded data, redacted for confidentiality restrictions, created a matrix of over 6,000 cells used in analysis. To address analytical transparency and provide a dataset that may contribute to further empirical studies, this matrix is included in appendices 2 and 3 of this thesis.

This unified data is significantly different to that analysed in U.S. rulemaking studies. This research combined information from early and later stages of rulemaking by a single administrative agency. It specifically selected a time period during which the Australian Building Codes Board’s rules and processes were not altered. U.S. studies predominantly analyse a single rulemaking stage,
combining findings from multiple administrative agencies (Rinfret & Cook 2014b). The approach in this research removed the variables of different agencies and provided visibility on internal influences on participation under a single stable administrative process.

7.6.1.3 New Approaches to Identification and Segmentation of Participants

This thesis has contributed a method to identify and group regulatory actors. Rulemaking study requires that participants are identified (Furlong & Kerwin 2005), yet identification is difficult (Daley 2012) and there is little commonality in terminology across the discipline (Houle 2010). Where previous research identified actors who actually participate (Furlong & Kerwin 2005; Golden 1998; Rinfret 2011; West 2004), this thesis applied studies from other areas of building and construction to also identify potentially absent and excluded actors. The approach has contributed to understanding of influences on actors who, although offered the opportunity to participate, may not actively do so.

U.S. rulemaking studies appeared to characterise government participants based on a mix of geographical or jurisdictional segmentation. These were distinguished by the region of responsibility, such as a city, or level of responsibility such as Federal, State or County. This thesis approached government segmentation through the theoretical context of Croley’s (2008) administrative process theory, characterising actors based on their formal recognition in the rules and procedures of the administrative agency. Applying this approach, government actors were identified based on whether they were referenced in the Australian Building Codes Board’s Intergovernmental Agreement (Commonwealth of Australia 2012). Commonwealth and State Government departments responsible for building were considered a single segment, while other departments such as the Commonwealth Department of Health or State Department of Education, considered separately. This segmentation provided new insight into the changes proposed by government participants, identifying differences in how each sought to change the stringency of the resultant code, which would not have been apparent with jurisdictional segmentation.

This research also applied a new approach to understanding the influence and role of the administrative agency’s internal participants. Previous U.S. studies modelled rulemaking agencies as single entities, excluding internal organisational processes (West 2005) and did not identify individual participants (Golden 1998). A contribution of this study is its differentiation between the Australian Building Codes Board administrative office, staffed by experts in building and regulation, the Board itself, with membership predominantly senior government administrators, and the Building Minister’s Forum of elected officials who set strategic priorities for the code in relation to societal needs and expectations. The segmentation then distinguished separate characteristics for
members on the Building Codes Committee, breaking this technical advisory group into individual representatives, identifying each member’s industry or government associations.

Analysing the different roles and participants within the Australian Building Codes Board contributed to the distinction in this research between the influence of expert and non-expert participants. This approach led to the research identifying the propensity of this administrative agency to change its view in response to experts on the Building Codes Committee, while finding it rarely changed in response to submitted public comments. Croley (2008) identified the problem of scholars anthropomorphising an administrative agency as a single entity rather than delving into its individual participants. The segmentation applied in this thesis addressed Croley’s concern and provided new insight to the stages of rulemaking within the administrative agency.

7.6.2 Contribution to Theory
The participatory landscape developed from the findings of this research makes a contribution to institutionalist theories of regulation by introducing participant expertise as a moderating factor on mechanistic rules of administrative process. Institutional theory argues that the role of participating actors is influenced by the organisational structures and administrative processes of agencies setting regulation (Baldwin, Cave & Lodge 2012; Carrigan & Coglianese 2011). Applying the findings from the analysis of 192 proposed building code changes, the participatory landscape combined the condition to encourage participation from administrative process theory (Croley 2008) with Yackee’s (2014) findings on participant voice.

The potential to improve the understanding of rulemaking through the study of administrative process is proposed by a number of authors (Croley 2008; Rinfret & Furlong 2012; West 2005; Yackee & Yackee 2010). This thesis has contributed to calls for empirical measurement (Garrett 2000) and contextual case studies (Croley 2008) on the administrative conditions which may lead to participation. The analysis of building code data provided support to Daley (2012) and Rinfret and Furlong’s (2012) findings that access to, or awareness of rulemaking processes did not necessarily translate to active participation. This finding indicated that simply providing access to rulemaking may not in itself encourage participation. It confirmed Croley’s (2008) view that achieving public interested outcomes from rulemaking is conditional on administrative agencies encouraging participation by applying procedures to increase public visibility and actively solicit participation from broad interests. Administrative rules and process may apply encouragement at differing levels from opening access, inviting participants or actively encouraging their involvement. The thesis therefore differentiated an opportunity to participate from the encouragement of participation, proposing the level and nature of encouragement as a spectrum. Analysis then showed that
processes to encourage participation may be influenced by factors which moderate the level of encouragement based on the potential participant’s expertise.

7.6.2.1 Placing Participant Voice and Information Capacity in the Australian Model
Prior U.S. rulemaking studies placed a focus on the influence of businesses and interest groups, with objectives to establish where these private interests participate in rulemaking to gain favourable outcomes and seek regulatory rents (Furlong 1997; Golden 1998; Rinfret & Cook 2014b; West 2005; Yackee & Yackee 2006). This Australian study shifted this focus and considered participation from Breyer’s (1982) informational aspect. This approach observed low participation rates by the general public and led to findings that participant expertise rather than a participant’s origin was a moderating influence in building code development. This finding introduced Yackee’s (2014) participant voice concept as a moderating effect on the processes of the Australian Building Codes Board, and provided a theoretical basis of how rules and processes may indirectly influence an actor’s decision to participate in rulemaking. Case analysis identified that the Australian Building Codes Board showed a propensity to encourage participation by those expert in regulation and appeared more responsive to information from experts. This contributes to Yackee’s (2014) theory by providing empirical measurement of expertise bias and supporting the influence of information capacity on participation.

7.6.2.2 Limitations on the Theoretical Contribution
This thesis applied institutional theory to the practices of the Australian Building Codes Board, supporting the theory’s contention that organisational structures and processes influence the role of actors (Baldwin, Cave & Lodge 2012; Carrigan & Coglianese 2011). The research then extended that finding by suggesting that the direct effect of rules and processes, and how they encourage participation, may be moderated by a potential actor’s level of domain expertise. Following the inductive approach, a model participatory landscape was developed combining the condition to encourage participation in Croley’s (2008) administrative process theory with Yackee’s (2014) participant voice model.

The finding of expertise as an influence on participation in rulemaking introduces the concept of informational capture. Identified as a potential opposition to administrative process theory (Croley 2008), informational capture suggests that administrative agencies are controlled not by coercion from participants but by controlling the information available to their decision makers. The analysis of the Australian Building Codes Board found that its administrative processes may restrict the availability of views from the general public. It may be argued that this exclusion could represent an example of informational capture, with the general public excluded in order to control the type of
information available for decision making. This research did not attempt to qualitatively understand the Australian Building Codes Board’s motivation for preferring expert information, nor can this motivation be ascertained form the dataset available. Therefore the research leaves an open finding as to whether the absence of non-experts may present an example of informational capture.

### 7.6.3 Contribution to Rulemaking Practice

In rulemaking ‘agencies would benefit from research regarding what factors should guide their choice of participatory process’ (Daley 2012, p. 501). The contribution to practice made by this research lies in the application of findings and the proposed participatory landscape to the current administrative processes employed by the Australian Building Codes Board.

Analysis of the Australian Building Codes Board’s processes identified three points which provided opportunities for participation, but found an absence of broad participation. A conclusion that allowing open participation does not translate to active participation supported the U.S. findings (Daley 2012). The participatory landscape developed from the findings has been applied to the practices of the Australian Building Codes Board and may also guide other administrative agencies when differentiating between allowing access, encouraging participation, and indirectly influencing potential participants.

#### 7.6.3.1 Achieving Intergovernmental Agreement Objectives

The research directly contributed to Australian practice by evaluating the Australian Building Codes Board’s administrative processes against key objectives set by its Intergovernmental Agreement. The objectives for a rigorous rationale, minimum regulatory outcome and alternatives to regulation were analysed in Chapter Five, with findings applied in relation to the four quadrants in the proposed participatory landscape.

The research found current practice does not necessarily provide a rigorously tested rationale for regulation. Although analysis of the administrative processes identify decisions which extend beyond simple yes or no outcomes, attempts at applying rigorous testing and analysis were biased towards a technical review by those expert in building or regulation. This expert review did not necessarily bring a balance of information types, representing both expert and societal views, to inform decision makers. This supports Golden’s (1998) U.S. findings that administrative agencies need to play a more active role informing groups affected by regulatory outcomes of the opportunities for participation.

This research did not empirically determine whether the objective to deliver a minimum level of regulatory intervention is achieved in practice. It did however raise questions over how the
administrative agency itself established a criterion for minimum levels without access to information on societal expectations. The contribution of the research was to identify the absence of this societal information from current practice and propose that the transition to efficient regulation may have moved the balance point between community expectation and net benefit too far towards the expert’s viewpoint.

The objective to reduce reliance on regulation was not evident in current practice, and the administrative process rarely explored alternative, non-regulatory mechanisms. At a theoretical level the research suggested individual practitioners in the process tend to use the tools at their disposal, reaching a self-evident finding that rule makers may show a propensity to solve problems by making rules!

7.6.3.2 Contribution to Current Administrative Process
This research did not support the proposition that the administrative processes used in the development and revision of Australia’s building code demonstrate a practical implementation of participation in rulemaking. This finding is applied through the development of specific recommendations for the current prescriptive practices in use by the Australian Building Codes Board. These recommendations addressed the language used in the documentation associated with the change proposal process and its inadvertent influence on participants. They also considered the current procedural pathways, recommending changes to the current proposal documentation in order to implement a second parallel pathway more suited to canvassing societal views.

7.6.4 Applicability to Other Rulemaking Agencies
At its outset this thesis identified that its findings may be applicable to other rulemaking and regulatory agencies that rely on participation to provide information for decision making. The research findings suggest that this may make the greatest contribution to those rulemaking agencies where a tension between domain expertise and societal expectations is evident. Examples are given by the National Food Standards, cited by the Australian Administrative Review Council (1992) and the U.S. Securities Commission researched by Nixon et al (2002).

These types of rulemaking agencies highlight the difference between participating actors who may best inform the resultant regulation and those in society whose lives may be affected by those regulatory outcomes. The difference between these two types of regulatory actor returns this conclusion to the opening paragraph in Chapter One of this thesis; a balance between the two is desirable, but difficult to achieve. The segmentation and participatory landscape articulated in this thesis may be applied to other rulemaking agencies to categorise their administrative processes and offer guidance towards that balance.
7.7 Future research

The call for a balance of views in regulatory theory is a longstanding discussion (Morgan & Yeung 2007) which continues in the two decades of literature evaluating influences in rulemaking (Furlong 1997; Yackee 2014). This thesis has contributed to understanding this balance of views in the context of participative processes employed by an Australian Government administrative agency. It has proposed a participatory landscape, extended research to the pre-proposal stages of rulemaking shaded from U.S. study (West 2009), and created a new dataset capturing the process of rulemaking in the context of a single administrative agency.

Using Australian data, this thesis developed a methodology to evaluate the pre-proposal stages of rulemaking. This was made possible through Australian legislative processes which formalise participation at the early stage of rulemaking, and this researcher’s access to information from an administrative agency which applied those processes. While this information contributes to the body of rulemaking literature, a future challenge lies in finding other government agencies which are also prepared to share empirical evidence of their rulemaking in practice. Having proposed a method to study the early stages of rulemaking not accessible to U.S. scholars, the researcher looks forward to the application of this method in the analysis of other Australian administrative agencies.

The initiation stage of the rulemaking process is also underreported in the literature (Rinfret & Cook 2013). By analysing the process used for submission of building code change proposals, this thesis has extended understanding of this initiation stage and the effect of those submissions on regulatory outcomes. Further research considering the other pathways by which the general public may initiate regulatory change, and the extent to which the general public can influence change, would extend knowledge on this early stage of rulemaking and the processes which set an administrative agency’s rulemaking agenda.

The proposed participatory landscape was developed using an inductive approach starting with observations of practice, identification of patterns, and formulation of the model (Creswell 2003). Future studies may choose to revisit this landscape deductively, testing it against observations in other rulemaking or regulatory domains.

The analysis and coding of 192 change proposals created a data matrix of over 6,000 cells. This matrix provides a four-year history of rulemaking under a stable administrative system and in the context of a single domain. A summary of the data, redacted for confidentiality requirements, is published in Appendix 3 and hopefully of value to other regulatory scholars, prompting future study.
By drawing information from the documented process and outcomes of rulemaking, the analysis in this thesis has focused on the ‘who’ and the ‘what’ of the administrative process. The motivation of actors, the ‘why’, was a recurring question through the analytical process which could not be qualitatively established from the information available in the collected data. Future research undertaking a qualitative study of actors in the rulemaking process could explore their motivation for participating, extending the expertise axis in the participatory model with other, and as yet uncovered participatory drivers.

We regularly entrust our lives to rules developed by administrative agencies of government, often unaware of the many influences they have over our behaviour. This research immersed itself in the single domain of building regulation, where administrative processes entrust groups of experts with the task of setting the safety, health, amenity and energy efficiency of our homes and workplaces. Many other rules regulating our daily lives are set by similar government agencies; such as food safety, motor vehicles, workplace safety and environmental protection. This thesis opened by observing the significant influence these rules have on the daily lives of society. It now closes by proposing a future research agenda which asks whether the members of society can also significantly influence the content of those rules.
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Appendix 1 – Proposal for Change Template

PROPOSAL FOR CHANGE –
NATIONAL CONSTRUCTION CODE SERIES

<table>
<thead>
<tr>
<th>INSERT TOPIC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCA Volume One:</td>
<td>Insert clause numbers</td>
</tr>
<tr>
<td>BCA Volume Two:</td>
<td>Insert clause numbers</td>
</tr>
<tr>
<td>PCA Volume Three:</td>
<td>Insert clause numbers</td>
</tr>
</tbody>
</table>

Proposer's Name:

Proposer's Organisation:

Postal Address:

Business Telephone:

Email:

1. What is the proposal?

2. What problem is the proposal designed to solve?

3. What evidence exists to show there is a problem?

4. How will the proposal solve the problem?

5. What alternatives to the proposal (regulatory and non-regulatory) have been considered and why are they not recommended?

6. Who will be affected by the proposal?

7. In what way and to what extent will they be affected by the proposal?

8. Who has been consulted and what are their views
Appendix 2 – Coding Used for Data Analysis

These tables summarise the coding used for aggregating data from the 192 change proposals used in this research.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding Description</th>
<th>Coding Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Number</td>
<td>Number allocated by the ABCB Office for tracking proposals</td>
<td>Alphanumeric number</td>
</tr>
<tr>
<td>ID#</td>
<td>Number allocated by this research to de-identify each proposal</td>
<td>Numeric identifier allocated</td>
</tr>
<tr>
<td>PFC Title</td>
<td>Title of proposal entered by proponent</td>
<td>Text string</td>
</tr>
<tr>
<td>Proposal Year</td>
<td>Year the proposal was submitted</td>
<td>Numeric</td>
</tr>
<tr>
<td>BCA Target Year</td>
<td>Publication year for the proposed change to take effect</td>
<td>Numeric</td>
</tr>
<tr>
<td>Volume</td>
<td>The volume or volumes of the National Construction Code the change will apply to.</td>
<td>1 - Volume 1&lt;br&gt;2 - Volume 2&lt;br&gt;3 - Volume 3&lt;br&gt;12 – Volumes 1 and 2&lt;br&gt;4 – Guide to the BCA</td>
</tr>
<tr>
<td>Provision Affected</td>
<td>The nature of provisions affected by the proposed change</td>
<td>A - General&lt;br&gt;B - Structure&lt;br&gt;C - Fire Resistance (Volume 2 section 3.7)&lt;br&gt;D - Access and Egress&lt;br&gt;E - Services and Equip&lt;br&gt;F - Health Amenity (Volume 2 section 3.8)&lt;br&gt;G - Ancillary&lt;br&gt;H - Special Use&lt;br&gt;I - Maintenance&lt;br&gt;J - Energy Efficiency (Vol 2 section 3.12)&lt;br&gt;K - Site Preparation (Volume 2 section 3.1)&lt;br&gt;L - Footings (Volume 2 section 3.2)&lt;br&gt;M – Masonry (Volume 2 section 3.3)&lt;br&gt;N - Framing (Volume 2 section 3.4)&lt;br&gt;O – Roof/Wall Cladding (Vol 2 section 3.5)&lt;br&gt;P – Glazing (Volume 2 section 3.6)&lt;br&gt;Q – Bushfire Aspects (Vol 1 Section G5 and Vol 2, Section 2.3.4)</td>
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Table A2-1: Base data for change proposal
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<tr>
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<tbody>
<tr>
<td>Proponent name</td>
<td>Name of proponent, de-identified from the dataset.</td>
<td>Text string</td>
</tr>
<tr>
<td>Proponent’s Organisation</td>
<td>Name of proponent’s organisation (if not an independent member of the general public), de-identified from the dataset.</td>
<td>Text string</td>
</tr>
<tr>
<td>Proponent’s address</td>
<td>Proponent’s address, de-identified from the dataset.</td>
<td>Text string</td>
</tr>
<tr>
<td>Proponent Category</td>
<td>Initial coding to distinguish government from independent proponents.</td>
<td>I – Independent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G – Government</td>
</tr>
<tr>
<td>Proponent Type</td>
<td>Nature of Proponent or their organisation.</td>
<td>O - ABCB Office staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A- State Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C - Council, Shire or City Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S - Standards Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G - Other Government bodies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I – Industry/Professional Associations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC - Independent companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PP - Independent person (general public)</td>
</tr>
<tr>
<td>Building Codes Committee membership</td>
<td>Identify if proponent is otherwise represented on the formal Building Codes Committee</td>
<td>Y – Yes</td>
</tr>
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<td></td>
<td></td>
<td>N - No</td>
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</table>

Table A2-2: Proponent information extracted from change proposals

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<th>Variable</th>
<th>Coding Description</th>
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<tr>
<td>Proposal Length</td>
<td>Length of proposal measured in pages.</td>
<td>Numeric</td>
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<tr>
<td>Attachment included?</td>
<td>Did proposal include attachments in addition to answering the eight questions in the template</td>
<td>Y – Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N - No</td>
</tr>
<tr>
<td>Attachment length</td>
<td>Length of all attachments to the proposal, measured in pages.</td>
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</tr>
<tr>
<td>Total Length</td>
<td>Length of proposal and attachments</td>
<td>Numeric</td>
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</table>

Table A2-3: Length of proposals and attachments
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding Description</th>
<th>Coding Used</th>
</tr>
</thead>
</table>
| Problem or solution              | Did the proponent draft proposed changes to the building code (a solution), identify a problem, or both? | S – Solution  
P – Problem  
B - Both |
| Problem character                | What was the character of the proposed problem?                                   | N - No clear problem identified  
C - Proposed a change in stringency  
E - Error correction (including rectification of inconsistencies)  
W - Wording or editorial change without changes to stringency (including clarifications to existing clauses) |
| Solution character               | What was the character of the proposed solution?                                  | N - No clear solution proposed  
C - Changes to wording of existing clauses proposed  
W - New clause/s proposed  
G - General proposed changes without specific drafting |
| Stringency change                | If adopted, how would the proposal alter the stringency of the resultant building code? | N - No change of stringency  
I - Increased stringency  
D - Decreased stringency |

Table A2-4: Nature of information in proposal

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding Description</th>
<th>Coding Used</th>
</tr>
</thead>
</table>
| ABCB Office Recommendation       | Did the Australian Building Codes Board administrative office support the proposal | S - Proposal was supported  
N - Proposal was not supported  
M - No recommendation made |
| ABCB Office Support Type          | Where proposals supported, the nature of the Australian Building Codes Board’s administrative office support. | S - Support the solution proposed  
P - Support the problem identified  
B - Support both problem and solution |

Table A2-5: Recommendations Made to the Building Codes Committee by the Australian Building Codes Board Administrative Office
<table>
<thead>
<tr>
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<th>Coding Description</th>
<th>Coding Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC Recommendation</td>
<td>What was the recommended outcome recorded in the minutes of</td>
<td>D - Place in draft of the building code for public comment</td>
</tr>
<tr>
<td></td>
<td>the Building Codes Committee meeting?</td>
<td>N - Do not include in draft building code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P - Refer for further analysis or initiate a project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G - Place in the Guide to the building code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E - Apply an education process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W - Proposal withdrawn before decision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U - Recommendation unknown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>O - Ongoing decision, not resolved during the time frame of this study</td>
</tr>
<tr>
<td>Nature of BCC Solution</td>
<td>Where a solution was to be included in the draft building</td>
<td>S - The proponent’s solution was used as proposed.</td>
</tr>
<tr>
<td></td>
<td>code, how was it developed?</td>
<td>E - The proponents solution was modified or edited</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P - The proponent did not submit a solution and one was prepared by the BCC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or ABCB Office</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A - An alternative solution was developed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N - The proposal was not supported</td>
</tr>
</tbody>
</table>

Table A2-6: Outcomes of the Building Codes Committee Meetings

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<th>Coding Description</th>
<th>Coding Used</th>
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</thead>
<tbody>
<tr>
<td>Included in public comment</td>
<td>Was the proposal reflected in changes made to the draft of</td>
<td>I - Included in public comment draft</td>
</tr>
<tr>
<td>draft</td>
<td>the building code made available for public comments?</td>
<td>N - Not included in public comment draft</td>
</tr>
<tr>
<td>Public Comments</td>
<td>Were public comments received against this change in the draft</td>
<td>Y - Public comments were received</td>
</tr>
<tr>
<td></td>
<td>building code?</td>
<td>N - Public comments were not received</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E - This proposal did not result to changes in the draft building code</td>
</tr>
<tr>
<td>Quantity of government</td>
<td>Quantity of public comments received from government</td>
<td>Numeric</td>
</tr>
<tr>
<td>comments</td>
<td>participants</td>
<td></td>
</tr>
<tr>
<td>Quantity of independent</td>
<td>Quantity of public comments received from independent</td>
<td>Numeric</td>
</tr>
<tr>
<td>comments</td>
<td>participants</td>
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</tbody>
</table>

Table A2-7: Participation at the Public Comment Stage
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<th>Coding Description</th>
<th>Coding Used</th>
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</thead>
<tbody>
<tr>
<td>Final Outcome</td>
<td>What was the final outcome arising from the proposal after the administrative processes?</td>
<td>B – Changes made to the published building code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G – Changes made to the Guide to the building code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I – Another informative method applied (preparation of a handbook or educational material)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R – Rejected, No action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P – Referred to a project group (with outcome not decided within the duration of this study)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S - Referred to a technical committee of Standards Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U – Unknown; final decision not made within the duration of this study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E – Proposal relating to the plumbing code and excluded from analysis</td>
</tr>
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</table>

Table A2-8: Final Outcome
Appendix 3 – Coded Data Summary for Each Change Proposal

Tables A3-1 through to A3-7 collate the coded data from each of the 192 change proposals analysed in this research.

Data Table A3-1: Proposal dates and building code provisions affected

<table>
<thead>
<tr>
<th>ID#</th>
<th>PFC Submission Year</th>
<th>BCA Target Year</th>
<th>Volume</th>
<th>Provision Affected</th>
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<tbody>
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<td>1</td>
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<td>5</td>
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<td>No evidence. Dealing with this in quantification of performance project</td>
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<td>62 Support the identified problem</td>
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<td>Supported but may need revision to Australian standard</td>
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<td>63 Not supported</td>
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<td>Not supported. Impact high and insufficient evidence</td>
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<td>64 Support both problem &amp; solution</td>
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<td>Insufficient justification for increased stringency</td>
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<td>Current BCA wording is appropriate</td>
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<td>68 Support the identified problem</td>
<td>Supported</td>
<td>Support in principle, but ABCB develop changes</td>
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<td>69 Support the identified problem</td>
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<td>71 Not supported</td>
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<td>Not required, misinterpretation</td>
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<td>Misinterpretation of clause and Australian standard</td>
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<td>Lack of demonstrated need</td>
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<td>Insufficient Evidence</td>
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<td>Insufficient justification</td>
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<td>Not supported. Propose note and change to Guide</td>
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<td>88 Not supported</td>
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<td>No additional info to previous public comment on BCA2011</td>
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<td>Not Supported</td>
<td>Not supported, but refer to relevant industry association</td>
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<td>92 Not supported</td>
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<td>Not supported, similar to proponent’s previously rejected Public Comment</td>
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<td>Request proponent examine other options</td>
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<td>Supported, but need Ministerial approval</td>
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<td>Supported, no change in stringency</td>
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<td>97 Not supported</td>
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<td>Not supported and an alternative change recommended</td>
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<td>98 Support the identified problem</td>
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<td>Support in principle</td>
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<td>99 Not supported</td>
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<td>Not supported based on published data</td>
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<td>Not supported, insufficient justification for change</td>
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<td>Issue for States/Territories. Not BCA problem</td>
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<td>Amend tables to remove inconsistency</td>
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<td>PFC based on incorrect assumptions, but does identify shortcomings. Partially supported with some amendments recommended</td>
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<td>ABCB Office PFC, correct error</td>
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<td>ABCB Office PFC, clarify requirements, remove uncertainty</td>
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<td>Considered at 5 previous BCC meetings, supported</td>
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<td>108</td>
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<td>Not Supported</td>
<td>Not Supported, addressed at industry forum, RIS and Sept Board Meeting</td>
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<td>Supported. ABCB recommended wording</td>
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<td>Referred to Standards Australia for advice at BCC2012-1, then considered at BCC2013-1</td>
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<td>Refer to Standards Australia for advice to BCC</td>
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<td>Supported, New diagram, Consulted with Energy Efficiency Reference Group</td>
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<td>Support the identified problem</td>
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<td>Would change stringency</td>
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<td>Supported, expanded to more clauses</td>
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<td>No Recommendation</td>
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<td>Supported with alternative text</td>
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<td>Inadequate justification</td>
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<td>Supported in principle</td>
<td></td>
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<td>Already discussed at BAF Conference (2011)</td>
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<td>Supported, even though hazard considered low</td>
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<td>No evidence. Does not propose solution</td>
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<td>Support both problem &amp; solution</td>
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<td>Supported in part</td>
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<td>Minimal evidence provided</td>
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<td>Support with amended wording</td>
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<td>Proposed solution not supported, but recognise problem and alternative change suggested (given that the PFC changed views, it was considered that the identified problem was supported)</td>
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<td>Support with alternate wording</td>
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<td>Not supported, considered previously</td>
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<td>PFC based on misinterpretation</td>
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<td>Support both problem &amp; solution</td>
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<td>Not supported. Public policy should not be in standards</td>
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<td>Not supported. Insufficient evidence</td>
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<td>Not supported, unnecessary</td>
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<td>Support in principle</td>
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<td>ABCB Office PFC</td>
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<td>Not supported; would change Premises Standard</td>
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Data Table A3-5: Building Codes Committee (BCC) recommendations for each proposal

<table>
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<tr>
<th>ID#</th>
<th>BCC Recommendation</th>
<th>Solution Recommended</th>
<th>Key notes from BCC Meeting Minutes</th>
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<tr>
<td>1</td>
<td>Include in Guide to BCA</td>
<td>Alternative solution developed</td>
<td>Amend Guide</td>
</tr>
<tr>
<td>2</td>
<td>Include in draft BCA</td>
<td>Proponent’s solution used</td>
<td>Support ABCB proposal</td>
</tr>
<tr>
<td>3</td>
<td>Include in draft BCA</td>
<td>Solution prepared by agency</td>
<td>Support ABCB proposal</td>
</tr>
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<td>Solution prepared by agency</td>
<td>Amend clause</td>
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<td>Clarify in Guide</td>
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<td>Solution prepared by agency</td>
<td>Direct at future energy efficiency project</td>
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<td>Include explanatory notes</td>
</tr>
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<td>ABCB office to establish amendment to diagram</td>
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<td>Request additional statistics</td>
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<td>Agree with ABCB office</td>
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<td>Liaise with industry group, then delete clause and refer to Standard</td>
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</tr>
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<td>Advised that these were minor and would be included in PCD for BCA2011</td>
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<td>Advised that these were minor and would be included in PCD for BCA2011</td>
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<td>Advised that these were minor and would be included in PCD for BCA2011</td>
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<td>Reconsider following revision of Australian standard</td>
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<td>Supported</td>
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<td>Supported</td>
</tr>
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<td>Supported in principle to review Acceptable Construction Practice (ACP) and refer to standards committee</td>
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<td>Agree with ABCB office</td>
</tr>
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<td>Do not include in BCA</td>
<td>Not supported</td>
<td>Not supported</td>
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<td>Include in draft BCA</td>
<td>Alternative solution developed</td>
<td>Agree with ABCB Office</td>
</tr>
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<td>Include in draft BCA</td>
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<td>Agreed</td>
</tr>
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<td>Support change. Also suggest adding diagrams to guide</td>
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<td>Not supported</td>
</tr>
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<td>Not supported</td>
<td>Not supported. Proposal sufficiently addressed through slips, trips and falls project</td>
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<td>Agreed with ABCB recommended amendments</td>
</tr>
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<td>Refer to relevant standards committee for more information</td>
</tr>
<tr>
<td>111</td>
<td>Referred for further analysis</td>
<td>Not supported</td>
<td>Ask relevant standards committee to reference in applicable standard</td>
</tr>
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<td>Supported</td>
</tr>
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<td>Supported in part</td>
</tr>
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<td>Use industry education</td>
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<td>Not supported, Article in ABRB for education</td>
</tr>
<tr>
<td>115</td>
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<td>Not supported</td>
</tr>
<tr>
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<td>Include in draft BCA</td>
<td>Proponent's solution used</td>
<td>Supported</td>
</tr>
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<td>117</td>
<td>Include in draft BCA</td>
<td>Solution prepared by agency</td>
<td>Supported for all regions</td>
</tr>
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<td>118</td>
<td>Include in draft BCA</td>
<td>Proponent's solution used</td>
<td>Supported</td>
</tr>
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<td>Include in draft BCA</td>
<td>Proponent's solution used</td>
<td>Supported</td>
</tr>
<tr>
<td>120</td>
<td>Referred for further analysis</td>
<td>Not supported</td>
<td>Refer proponent to upcoming Premises Standard review in 2015</td>
</tr>
<tr>
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<td>Supported</td>
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<td>BCC believed this was a policy issue rather than technical decision</td>
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<td>Support with call for further clarification of impact</td>
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<td>Not supported</td>
<td>Mixed views, but not supported</td>
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<td>Peer review of paper and further consideration</td>
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<td>Solution prepared by agency</td>
<td>Agreed with one of the proposed ABCB solutions</td>
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<td>Agree with ABCB office</td>
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<td>128</td>
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<td>No consensus, referred to chair for further consideration</td>
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<td>129</td>
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<td>Request further investigation</td>
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<td>130</td>
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<td>Support with verification of equal stringency</td>
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<td>Proponent's solution used</td>
<td>Supported</td>
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<td>132</td>
<td>Include in draft BCA</td>
<td>Solution prepared by agency</td>
<td>Supported</td>
</tr>
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<td>Not supported for BCA changes, but recommended for inclusion in Guide</td>
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<td>Clarification to be added to BCA</td>
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<td>Further info from proponent</td>
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<td>Request consultation with relevant State government department having jurisdiction</td>
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<td>Clarify intent in Guide</td>
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<td>Request further info from State Administrations</td>
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<td>Alternative solution developed</td>
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<td>Supported</td>
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<td>Supported, lack of info</td>
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<td>Supported principle, but refer to a project</td>
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<td>181</td>
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<td>Not supported, but get additional info for future project work</td>
</tr>
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<td>182</td>
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<td>Current method adequate</td>
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<td>Do not include in BCA</td>
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<td>May be considered in 5 year review of Premises Standards</td>
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### Data Table A3-6: Public comment submissions received against each proposal

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<th>Public Comments Received?</th>
<th>Quantity of Public Comments Received</th>
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