

BUILD BETTER

A blueprint for delivering better building outcomes in New South Wales.

April 2019





Table of Contents

F	DREWO	RD	4
E	KECUTI	/E SUMMARY	5
1	INTR	DDUCTION	9
2	THE I	HISTORY OF BUILDING REGULATION IN NEW SOUTH WALES	. 11
3	CURF	RENT REGULATORY FRAME WORK IN NSW	. 15
	3.1	Ministerial Responsibility	. 15
	3.2	Regulatory Functions	. 16
	3.3	Regulator Responsibilities and Model	. 17
4	BETT	ER OUTCOMES FLOWING FROM IBC'S	. 20
	4.1	Regulatory Framework in Victoria and Queensland	. 20
	4.1.1	Ministerial Responsibility	. 20
	4.1.2	Regulatory Functions	. 21
	4.1.3	Regulator Model	. 23
	4.2	Regulatory Outcome Comparison	. 25
	4.3	More detail regarding the VBA and QBCC	. 32
	4.4	The better outcomes delivered by Independent Building Commissions	. 34
5	NSW	BUILDING & CONSTRUCTION COMMISSION BLUE PRINT	. 37
	5.1	Ministerial Responsibility	. 37
	5.2	Regulatory Functions	. 37
	5.3	Governance	. 39
	5.4	Structure	. 40
	5.5	Costing	. 41
	5.6	Funding	. 42
6	COST	BENEFIT ANALYSIS	. 44
	6.1	UNDER-REGULATION PRESENTS UNNECESSARY COSTS FOR BUILDER & HOMEOWNERS.	. 45
	6.2	AVOIDING RE-WORK IS A KEY BENEFIT OF MORE EFFECTIVE REGULATION THAT IS OFTE OVERLOOKED	
	6.3	COST-BENEFIT ANALYSIS SUPPORTS REGULATION OF THE NSW BULDING & CONTRUCTION OF THE NSW BULDING & CONTRUCTION OF AN INDEPENDENT BUILDING COMMISSION	
7	A PLAN	FOR IMPLEMENTATION	. 53
RI	EFEREN	ICES	. 54
		CES	
	APPEN	DIX A: STAFF COSTINGS FOR NBCC	. 56
	APPEN	DIX B: OPERATING COSTINGS FOR NBCC	. 63
	APPEN	DIX C: NBCC REVENUE AND EXPENDITURE	. 64
		DIX D: NBCC FORWARD PROJECTIONS	
		DIX E: ESTIMATE OF REVENUE FROM NEW REGISTRATION OF ADDITIONAL PRACTITIONER	
	APPEN	DIX F: ESTIMATE OF NBCC LICENSING REVENUE	. 67
	APPEN	DIX G: ESTIMATE OF COMPLIANCE NOTIFICATION REVENUE	. 68
	APPEN	DIX H: HIGH-LEVEL NBCC BUDGET	. 69
	APPEN	DIX I: ESTIMATE OF REVENUE FROM BUILDING CONSENT LEVY FUNDING MODEL	. 70
	APPEN	DIX J: TRIBUNAL DISUTE DATA	. 71
	APPEN	DIX K: PREVIOUS RE-WORK COST RESEARCH	. 72



APPENDIX L: IMPLEMENTATION TIMELINE	. 75
APPENDIX M: ABS RESIDENTIAL HOUSING COMPLETION AND COST DATA	. 76
APPENDIX N:DATA SOURCES	. 77
APPENDIX O: COMPLAINT DATA	. 78
APPENDIX P: HOME BUILDING COMPENSATION DATA	. 79
Endnote references	80



FOREWORD

Many reports and enquiries into the NSW building and construction industry have advocated the establishment of an independent building commission.

In 2002 an inquiry into the *Quality of Buildings in NSW (Campbell Report)* reported there were a number of structural problems within the home building process, including the fragmentation of the regulatory regime. An example was provided whereby certifiers and building practitioners were regulated by different government agencies. A key recommendation of the Campbell Report was for establishment of a Home Building Compliance Commission, independent of the State Department of Fair Trading.

Master Builders supported the recommendation. However, the Association sought as a policy position that the establishment of a Building Commission should hold an overarching responsibility for all sectors of the NSW building and construction industry – and not just the residential sector.

Master Builders has, for over 15 years, continued to present this key policy position in order to consolidate the regulation and administration of the building and construction sector in NSW.

More inquiries into the NSW building and construction sector have given support, and also made recommendations for establishment of a single state building regulator.

The 2013 independent Bruce Collins Inquiry into Insolvency in the NSW Construction Industry made the key recommendation that the NSW Government undertake a cost benefit analysis for the establishment of a separate autonomous statutory authority called the "NSW Building and Construction Commission". (The Baird Government committed to undertake the cost-benefit analysis in 2015).

The NSW Independent Pricing and Regulatory Tribunal (IPART) has also given its support for the establishment of a single building authority, to improve building compliance and enforcement. In 2014, the NSW IPART outlined its recommendation to establish a single state building regulator in its draft report into Local Government Compliance and Enforcement.

The independent review of the Building Professionals Act, (2005) undertaken by Michael Lambert released his report in late 2015. The report, amongst other things, called for the establishment of Office of Building Regulation to consolidate building regulations in the state of NSW.

In New South Wales the fragmented and inefficient approach to building and construction regulation, in our view, has resulted in sub-optimal building outcomes which only serve to undermine the community's confidence in our industry.

Accordingly, Master Builders commissioned a comparative analysis of the regulatory building outcomes being achieved in Victoria and Queensland which have for some time, taken a co-ordinated and consolidated approach in recognition of the significance of a vibrant building and construction industry.

The analysis conclusively revealed that superior regulatory building outcomes were being achieved in Victoria and Queensland with the presence of an independent building regulator shown to be a major contributing factor to delivery of those outcomes.

Upon completing the comparative analysis, the best features of the regulatory frameworks in Victoria and Queensland were selected and included in this reform blueprint for the delivery of better building outcomes

It is hoped that the reform blueprint developed by Master Builders will assist the NSW Government with implementation of much needed structural reform of the regulatory framework for the building and construction industry in NSW.

Given the value of our industry to the economic wellbeing of New South Wales our industry and the community rightly deserve the significant benefits that would flow from having an independent building regulator in this state.

Brian Seidler EXECUTIVE DIRECTOR



EXECUTIVE SUMMARY

The building and construction sector is an integral part of the Australian economy. Data from the Australian Bureau of Statistics (ABS) shows that Australia's expenditure on construction in 2017-18 totalled \$A115.1 billion. This spend on construction accounted for approximately 8% of Australia's Gross Domestic Product (GDP).

In 2017-18 expenditure on residential construction in Australia totalled A\$74.1 billion with A\$25.9 billion of this in New South Wales. Expenditure on residential construction alone in New South Wales in 2017-18 equated to 4.6% of State Domestic Product (SDP).

The building and construction sector remains the third largest employer in Australia, employing 1,167,200 people at the beginning of 2018¹.

Considering the importance of the residential sector and how it supports the economy through the generation of employment and an output multiplier effect of up to 1.93 (i.e. for every \$100 spent on residential building, \$93 is spent elsewhere in extra production), it is vital that the industry runs efficiently and effectively².

An effective building regulatory regime and building regulator are key components to ensuring efficiency and effectiveness of the sector.

From a homeowner or consumer perspective, effective regulation is vital in terms of reducing risk. Constructing a new home or renovating is one of the most significant purchasing decisions made by an individual in their lifetime. The vast majority of homeowners borrow significantly to undertake building or renovation projects. In this context, any failure to complete construction to appropriate standards places homeowners at significant financial risk

From a builder perspective effective, regulation is also vital in terms of reducing the financial risks that they face when undertaking building projects. Builders are heavily reliant upon the skills, expertise and professionalism of a range of building practitioners many of whom are not currently regulated at all.

When building practitioners fail to act professionally or with due care and skill the cost of rectification of the resulting defective building work is borne by the builder. Bearing the cost of rectification work (also referred to as remediation or re-work) is a major contributing factor of builder bankruptcy and insolvency and one of the reasons why builders have such a high rate of insolvency.

In acknowledging the financial risk to homeowners of poor building outcomes, all States and Territories in Australia have introduced regulation of the building and construction sector. Recognising the financial risks to builders of poor building outcomes some states have also introduced licensing of commercial building and, most importantly, regulation of all building practitioners involved in the building process.

In Victoria and Queensland regulation of the building and construction industry is delivered by independent building authorities or commissions. The Victorian Building Authority (VBA) in Victoria and the Queensland Building & Construction Commission (QBCC) in Queensland consolidate regulation of the building and construction industry in those states.

The QBCC in Queensland is also the provider of home building compensation (still referred to as home warranty insurance in that state).

Victoria and Queensland also have one senior Minister responsible for regulation of the building and construction industry. In Victoria the Minister for Planning is the Minister responsible for building and construction regulation and in Queensland it is the Minister for Housing & Public Works.

The regulatory regimes in place in New South Wales are in stark contrast to those in Victoria and Queensland. In New South Wales ministerial and regulator responsibilities are fragmented and a range of critical building practitioners sit outside the regulatory framework. The licensing regime for builders in New South Wales is also inconsistent with the approaches adopted in Victoria and Queensland.

As the regulatory frameworks in Victoria and Queensland have been in place for over two decades, Master Builders undertook a comparative analysis to determine whether jurisdictions that have independent building commissions or authorities and single senior ministerial responsibility frameworks delivered better building regulatory outcomes than those that were being achieved in New South Wales.



Data relating to key building regulatory performance indicators including:

- building complaints and disputes;
- tribunal building disputes or claims;
- home building compensation premiums; and
- home building compensation claims costs

was obtained to carry out the comparative analysis.

The comparative analysis undertaken conclusively indicated that significantly better building outcomes were being delivered in those jurisdictions where the building and construction industry is regulated by an independent building commission or authority. The table below summaries the outcomes of the comparative analysis. The detailed comparative analysis is set out within chapter 4 of this paper.

	Key Performance Indicator	NSW	Victoria	Queensland	Average Total Difference (%)
1	Building Complaints 2017-18 (per 1000 homes)	132.8	23.2	99.8	
	Difference in Outcome (%)		82.5%	24.9%	53.7%
2	Tribunal Disputes 2017-18 (per 1000 homes)	45	26	8	
	Difference in Outcome (%)		42.2%	82.2%	62.2%
3	Tribunal Dispute Costs 2017-18	\$14,000,000	\$9,300,000	\$2,440,000	
	Difference in Outcome (%)		33.6%	82.6%	58.1%
4	Home Building Compensation Premiums Collected 2017-18	\$130,000,000	\$68,800,000	\$82,800,000	
	Difference in Outcome (%)		47.1%	36.3%	41.7%
5	Home Building Compensation Claims Costs 2002-18	\$506,783,517	\$276,384,000	\$304,070,110	
	Difference in Outcome (%)		45.5%	40.0%	42.7%
6	Home Building Compensation Premiums (2017-18) for \$500K dwelling	\$5,695.25	\$3,158	\$4,883.25	
	Difference in Outcome (%)		44.5%	14.3%	29.4%

48.0%

Table (i) Summary of better building outcomes being achieved in Victoria and Queensland.

Research conducted over the past two decades in Australia and overseas in relation to the incidence of defective building work in the residential building sector was combined with the comparative analysis undertaken by Master Builders to determine the overall benefits that are likely to accrue from further regulation of the industry in NSW.

Previous research indicates that over 5% of the value of residential building work in Australia each year is defective building work requiring 'non-productive' re-work. The estimated cost of rectifying defective residential building work in Australia in 2017-18 is estimated to be a staggering \$3.7 billion. Based on this research the cost of non-productive re-work to the economy of New South Wales is estimated to exceed \$1.3 billion per annum.

Acknowledging the appreciable benefits being derived in those jurisdictions with independent regulators and the savings to the industry from reducing non-productive re-work, Master Builders has developed a reform blue print inclusive of the establishment of an independent building commission in New South Wales.

The independent building commission (the NSW Building & Construction Commission) proposed by Master Builders would be a statutory authority reporting to the NSW Minister for Planning and Public Spaces (see figure (i) below).



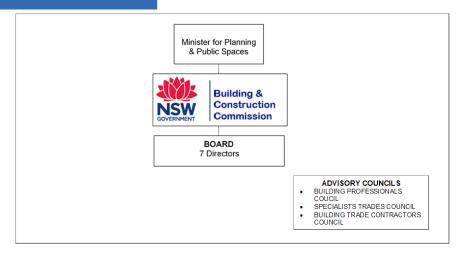


Figure (i) Proposed NSW Building & Construction Commission.

The functions, governance and staffing of the independent building commission proposed in the blueprint are based upon the functions, governance frameworks and resource utilisation of both the VBA and QBCC.

The proposed NSW Building & Construction Commission (NBCC) would be governed by a Board of directors appointed by the Minister for Planning and Public Spaces. The Minister would also appoint industry representatives to each of the three Advisory Councils proposed by the blueprint.

The Advisory Council comprising representatives from industry groups regulated by the NBCC would:

- ensure the Minister, NBCC Board and Commissioner are provided will timely advice regarding emerging trends and industry issues;
- in keeping with best practice regulatory principles allow the industry to have a say in how it is being regulated; and
- assist the NBCC Board and Minister with the development of regulatory policy for the industry.

The NBCC would bring together and be responsible for all of the existing regulatory functions, including:

- Building contractor regulation (currently within NSW FT Better Regulation);
- Building Professionals Board (currently with Better Regulation);
- Security of Payments (currently with Better Regulation);
- · Architects Registration Board (currently with DFSI); and
- NSW input into the Australian Building Codes Board and Building Minister's Forum.

The NBCC would be made responsible for implementing the NSW Government's reforms in relation to the registration of engineers and building designers together with a regime for the submission of building compliance documentation to the Government.

Given the Queensland Building & Construction Commission's (QBCC) longstanding success in operating a sustainable and well-regarded home building compensation scheme, the blueprint also proposes that the NBCC also be made responsible for the provision of home building compensation in NSW.

The comparative analysis undertaken clearly shows that operation of the home building compensation scheme by the industry regulator produces the incentives necessary for lowering risks to homeowners to levels whereby a sustainable home building compensation scheme can be delivered to the industry and homeowners of NSW.

The NBCC will employee 272 full-time equivalent staff and have a budget of around \$126m per annum.

The blueprint contains a detailed costing for the operation of the NBCC and puts forward a range of options for funding the commission that would ensure that it would be a non-budget self-funding entity.

As is the case in Victoria and Queensland, the NBCC will be the central collector and repository of industry information and data. The data sets collected will be made available to government, the industry and community in real-time. The data sets will enable government to make agile policies decisions relating to the industry. Given



the industry's significance to the NSW economy the data collected will also provide leading indicator economic data critical decisions being made by Treasury and the NSW Government.

As recommended by the Collins inquiry in 2013, the blueprint also contains a cost benefit analysis. The analysis outlined in this paper indicates that there are substantial benefits to be gained from establishing an NBCC and the licensing (registration) of building designers and engineers who carry out critical roles in the building process.

The analysis concludes that the benefits to homeowners and the economy of NSW substantially exceed the cost of further regulation with a benefit-cost ratio exceeding 2.3:1.

In summary, the analysis strongly suggests that further regulation has the potential to substantially improve building outcomes in terms of reducing the incidence of defective building work, but more importantly, lowering the cost of construction in NSW thereby making home ownership more affordable and attainable.

Master Builders is heartened by the NSW Government's commitment to broaden the licensing and registration regime and consolidate the regulatory framework under a building commissioner. However, the comparative analysis shows that the additional structural reform outlined in this reform blueprint is critical to ensuring that better building outcomes are delivered to the industry and community of NSW.

Master Builders is certain that implementation of its blueprint by the Government will:

- Significantly reduce building and construction costs in NSW;
- Significantly reduce home building compensation (HBC) premiums;
- Result in the delivery of a sustainable HBC scheme;
- Bring about a profitable and vibrant building & construction industry;
- Improve investor and consumer confidence in investing in building and construction; and, most importantly
- Improve housing affordability for all.

It is hoped that the blueprint developed by Master Builders for the establishment of an independent building commission will assist the NSW Government with implementation of much needed reform of the regulatory framework for the building and construction industry in NSW thereby delivering the better building outcomes being enjoyed elsewhere in Australia.



1 INTRODUCTION

Builders rely heavily upon building professionals, such as architects, building designers, engineers, fire protection system specialist and certifiers when undertaking construction, yet many of these building practitioners are not currently subject to regulatory framework in New South Wales.

Builders are also reliant upon the skills and experience of the trade contractors (concreters, carpenters, plumbers, electricians etc) who they engage to complete elements of building projects to the standards required by the National Construction Code (NCC) and the Australia Standards called up the NCC.

Under the building laws across Australia, when things go wrong it is the builder who is deemed responsible and bears the cost of rectification - not the building practitioners and contractors that they engaged.

It is acknowledged that regulation and intervention by governments to correct market failure should be seen as an option of 'last resort'. However, there continues to be significant market failure in the building and construction sector that, if left unchecked, will increasingly impact on homeowners and the NSW economy.

Unlike other markets where de-regulation is entirely appropriate, regular media articles and statistical data suggest that the residential building sector in NSW is seriously under-regulated and hampered by a fragmented approach to regulation.

The incidence of defective building work across Australia continues unabated with the use of new and untested building products from overseas only adding to the problem.

Apartment building defects

Research conducted by the UNSW City Futures Research Centre in 2012 found that 72% of apartment blocks in NSW had defects. For newer units, the likelihood of defects is even higher – 85% of apartments built since 2000 have defects. And these statistics are indicative of the story of building defects all down the eastern seaboard.

15 September 2016



Home building compensation underwriters and their actuaries appreciate the growing problem of defective work in the building and construction sector, increasing total premiums collected in Australia by 200% over the past decade from \$79m in 2006 to \$242m in 2016. Over the past two years the home building compensation provider in NSW, iCare, has increased premiums by more than 60% with further increases planned for 2019.

Given these red flags the Victorian and Queensland Governments have moved to increased regulation of the building and construction in recent years. Whereas until more recently there has been a reluctance to bring forward further regulation of the building and construction sector in NSW.

The industry in NSW has rightly questioned why there was strong resistance from government to considering regulatory reform.

Master Builders believe that the reason for this outcome is that policy makers responsible for carrying out cost–benefit analysis as part of Regulatory Impact Statement (RIS) or Legislative Impact Assessment (LIA) processes have not had access to the right data sets to enable them to reach optimal conclusions

regarding new regulatory proposals. For this reason, many sound proposals for regulatory change in the building and construction sector have not been advanced as has been the case elsewhere in Australia.

In acknowledging this problem, Master Builders has developed this blueprint paper bringing together the relevant data and information with a view to assisting the NSW government with future regulatory assessment processes, in particular its recent commitment to consolidating building regulation in the State.

Prior to the State election on 23 March 2019 the NSW Liberal National Government committed itself to:

"Appointment of a Building Commissioner to act as the consolidated regulator for the construction industry in NSW. The Building Commissioner will be responsible for the licensing and auditing of registered practitioners, and for other key functions necessary to lead and oversee building regulation and administration".

The Government indicated that the Commissioner's role will include:

- licensing and authorisation of building practitioners;
- · residential building investigations;
- · building plan regulation and audit;



- · residential building inspections and dispute resolution;
- plumbing regulation;
- · electrical and gas safety regulation;
- · strata building bond scheme;
- building product safety;
- building and construction security of payment scheme; and
- engagement and strategic collaboration with local government.

The blueprint, data collection and analysis set out with this paper has been undertaken by Master Builders to assist the NSW Government with its plans for further and meaningful regulatory reform of the building and construction industry in New South Wales.

Chapter 2 provides an overview of the developments of regulatory reform relating to the building and construction industry in New South Wales since the early 1970's. Chapter 3 then sets out the current fragmented regulatory framework in New South Wales.

Chapter 4 sets out the result of the comparative analysis undertaken. Then Chapter 5 sets out in detail the blueprint for an NSW Building & Construction Commission. A cost benefit analysis in relation to the creation of an NBCC and further regulation of building practitioners it then outlined in Chapter 6 and a proposed implementation plan is set out in Chapter 7.



2 THE HISTORY OF BUILDING REGULATION IN NEW SOUTH WALES

1970's

- In 1971 the NSW Government passed the Building Licensing Act 1971 creating the Builders Licensing Board (BLB). The BLB was made responsible for setting qualifications requirements for builders and regulating builders.
- In 1972 two home warranty insurance schemes commenced operating under the 'House Purchasers
 Agreement' and 'Trade Indemnity Agreement'. Both schemes were administered by the Builders
 Licensing Board. The House Purchasers Agreement initially provided cover of up to \$40,000 for
 individual building work above \$1,000. The Trade Indemnity Agreement initially provided cover above
 \$200 up to \$1.000
- for work performed by individual tradespersons.
- Between 1972 and 1978 the BLB extended licensing to various trade occupations
- In 1979 the Plumbers, Drainers & Gasfitters Act 1979 was passed by the NSW Government and took effect in April 1980. The PD&G Act created a Plumbers Board who were responsible for the licensing of plumbers, drainers and gas fitters.

1980's

- The Plumbers Board was subsequently merged with the Builders Licensing Board to form the Building Services Corporation (BSC) in 1987 following the passing of the *Building Services Corporation Act 1987* (later replaced by the Building Services Corporation Act 1989).
- In 1989, the NSW Government passes the Home Building Act 1989. Many of the provisions of that Act remain today.
- In March 1990 the Home Purchasers Agreement and the Trade Indemnity Agreement were replaced
 with the Comprehensive Insurance Scheme and the Special Insurance Scheme, established under the
 Building Services Corporation Act 1989.
- Under the Comprehensive Insurance Scheme, the maximum cover for defective work was \$100,000 and \$25,000 for incomplete work. Major structural defects were covered for seven years, and general defects for three years, from the date of substantial commencement of the building work. The Special Insurance Scheme applied to other residential building work, being single trade or specialist trade work. The maximum level of cover was \$10,000 for one year.

1990's

- In 1990, the NSW Government amends the BSC Act making the BSC responsible for the licensing of electrical contractors and abolishes renewal fees for qualified supervisors.
- The 1992 report by the Royal Commission into the Building Industry was released (the Gyles report) recommending, amongst other things, a move towards the private underwriting of home warranty insurance.
- In 1993 the Dodd Inquiry into the Building Services Corporation (the Dodd report) recommended the disbanding of Building Services Corporation and a move toward private underwriting of home warranty insurance.
- In 1995 the NSW Government accepted the recommendations of the Dodd Inquiry and the former BSC
 is integrated into the Department of Fair Trading (now the Office of Fair Trading which from 2003 formed
 part of the Department of Commerce).



- After the State election in 1995, the Government examined the possibility of introducing an insurance scheme operated by the private sector.
- In November 1996 the NSW Government passed amendments to the HBA establishing mechanisms for home warranty insurance to be provided private insurers. Under the private scheme all defects were required to be covered for seven years. The minimum cover required was \$200,000. This applied to both defective and incomplete work.
- In May 1997 the private Home Warranty Insurance scheme commenced.
- The introduction of the scheme coincided with the disbandment of the BSC insurance schemes.
 However, the Government retained responsibility for potential future claims made under the old schemes. The Government continued to administer the run-off of the closed BSC schemes through the Fair Trading Administration Corporation (FTAC).
- The scheme's assets were exhausted resulting in claims being funded out of the Government's
 consolidated fund. Generally, no further claims were accepted after 30 April 2004. However, the Home
 Building Act 1989 provided for the Commissioner for Fair Trading to exercise discretion to accept claims
 for an additional three years.
- In 1998, the NSW Government amends the Environmental Planning & Assessment Act 1979 to allow for certification by private principle certifying authorities.

2000's

- In March 2001 HIH/FAI collapsed creating severe dislocation of the Home Warranty Insurance market. HIH/FAI had around 30–40% of the HWI market and, in many cases the HIH offered the lowest premiums and easiest criteria for builders to obtain cover.
- After the HIH/FAI collapse, significant delays were caused to builders attempting to obtain cover for new
 work. Some ex-HIH/FAI clients also could not meet the requirements of the remaining insurers
 underwriting the scheme Royal & Sun Alliance (Vero), Dexta/Allianz and Reward.
- In April 2001, the Government established the HIH Rescue Scheme. Homeowners covered by HIH/FAI policies were indemnified by the Government, with the Rescue Scheme for Home Warranty Insurance administered by the Building Insurers' Guarantee Corporation (BIG Corp).
- In February 2002 the Consumer, Trader and Tenancy Tribunal (CTTT) was established to handle building dispute claims.
- In March 2002 the NSW and Victorian Governments moved to put in place arrangements for the
 necessary reinsurance for Allianz to continue supporting Dexta to provide Home Warranty Insurance.
 However, on 31 December 2002, Dexta ceased writing new business as its insurer, Allianz, withdrew
 from the market.
- In June 2002 the report into the National Review of Home Builders Warranty Insurance and Consumer Protection (the Allen report) was released.
- In July 2002 amendments to the *Home Building Act 1989* via the *Home Building Amendment* (*Insurance*) *Act 2002* commence. The amendments make fundamental changes to the home warranty scheme including moving from a "first resort" to "last resort" scheme. Cover now only provided in the event of the death, insolvency or disappearance of the builder. Period of cover is reduced from seven years to six years after completion of construction.
- In 2002 the report by the Joint Select Committee on the Quality of Buildings (the Campbell report) released recommending the establishment of an independent Building Authority.
- In February 2003 the NSW Government announces that, in response to the Campbell Report recommendations, it will establish the NSW Home Building Service (a major division within NSW Fair Trading). The Home Building Service includes additional investigators to provide onsite inspection and mediation services.
- In May 2003 Minister Della Bosca announces the Inquiry into the New South Wales Home Warranty scheme and Mr Richard Grellman is appointed by the Governor of New South Wales to undertake the Inquiry.



- In July 2003 the Home Building Service commences to deliver dispute resolution and onsite inspection and mediation services.
- In October 2003 the final report of the NSW Home Warranty Insurance Inquiry released. The
 Government endorses the thrust of the principal recommendations. The Inquiry found that home
 warranty insurance should continue to be provided by the private sector and made seven primary
 recommendations for reform of the scheme to ensure its transparency and accountability as well as its
 accessibility and affordability to builders and the level of protection provided to homeowners.
- A Home Warranty Insurance Scheme Board is appointed to oversee the implementation of the Inquiry's recommendations.
- In December 2003, the NSW Government amends the HBA removing the requirement for home warranty insurance in relation to the construction of high-rise (multi storey) residential buildings (i.e. buildings with a rise of more than three storeys containing two or more dwellings).
- Australian International Insurance Limited (AIIL) takes over the home warranty insurance business of Reward Insurance Limited.
- In May 2004 approval is given for CGU Insurance Limited (part of the IAG Group) to provide home warranty insurance in New South Wales.
- In November 2004, the Commonwealth Productivity Commission releases its research report into Reform of Building regulation.
- In February 2005 approval is given for Lumley General Insurance Limited to provide home warranty insurance in New South Wales.
- In May 2005 approval is given to QBE Insurance (Australia) Limited to provide home warranty insurance in New South Wales
- In September 2006, a review of Licensing in the NSW Building Industry is conducted by Ms Irene Moss following ICAC's detection of fraudulent builder licence application schemes.
- In November 2007, report of an inquiry into the NSW Home Building Service by the NSW Legislative Council.
- In November 2009 private underwriters indicate their intent to leave the HWI market in New South Wales.

2010's

- 1 July 2010, the Self-Insurance Corporation (SiCorp) of NSW Treasury commence underwriting home warranty insurance in New South Wales. SiCorp utilises agents QBE and Calliden to deliver services to builders and homeowners.
- In November 2012, a review into insolvencies in the NSW Building Industry conducted by Mr Bruce Collins is released.
- In May 2013, the Government releases a review completed into Certification conducted by Mr George Maltabarow.
- In July 2014, the NSW Government changes the name of home warranty insurance to 'home building compensation' (HBC).
- In late 2014, NSW Fair Trading is merged into the Better Regulation Office (part of the Department of Services, Technology and Innovation).
- In 2015 Owner Builders are moved from the requirements to hold HBC cover and the NSW Self Insurance Corporation changes its name to 'iCare'.
- In August 2015, IPART releases its report into Reforming Licensing in NSW.



- In October 2015, the NSW Government releases the report into a review of the *Building Professionals Act 2005* conducted by Mr Michael Lambert.
- In November 2015, the NSW Government releases a discussion paper in relation to reforms to the HBC announcing that iCare has a \$398m deficiency in relation to HBC.
- In November 2016, the NSW Government announces reforms to HBC along with a return to private provision of HBC cover by both insurers and alternative indemnity providers.
- On 22 June 2017, the NSW Government passes amendments to the Home Building Act 1989 in relation to its planned reform to HBC.
- Mid-2017, the Building Ministers Forum (BMF) agreed to commission a review assessing the
 effectiveness of compliance and enforcement systems for building and construction across Australia.
- In December 2017, the *Home Building Regulation 2014* is amended, and guidelines are published allowing for the commencement of the reforms to HBC on 1 January 2018.
- On 1 January 2018, Legislative reforms allowing new private providers to enter the HBC market with new product offerings commences.
- In February 2018, the BMF releases the Building Confidence report setting out the findings of a review conducted by Peter Shergold and Bronwyn Weir.
- 10 February 2019, Minister for Better Regulation, the Hon Matt Keen, MP announces the NSW Government's commitment to consolidation of building regulation in response to Shergold/Weir report.



3 CURRENT REGULATORY FRAMEWORK IN NSW

3.1 Ministerial Responsibility

Currently, responsibility for the regulation relating to building and construction in New South Wales is fragmented with four separate Ministers responsible for various elements of the regulatory framework (see figure 1 below)

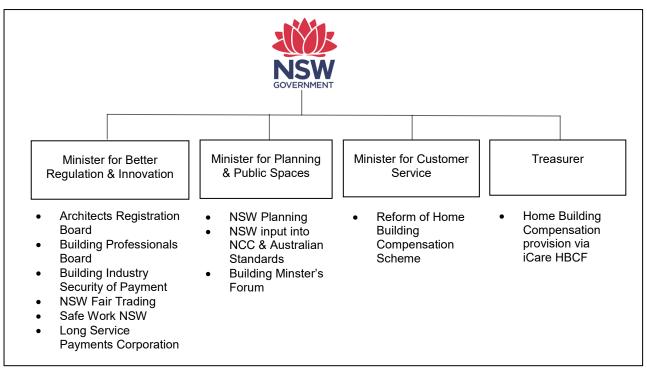


Figure 1 Ministerial portfolio responsibilities relating to the building & construction industry in NSW

Master Builders believes the current fragmentation of ministerial portfolio responsibilities is preventing the NSW Government from arriving at a single and comprehensive view of the building and construction industry which hampers the development of effective regulatory policy responses to existing and emerging issues impacting upon the industry.

There would be substantial and appreciable benefits to the NSW Government in bringing forward further machinery of government changes whereby a single senior cabinet Minister has portfolio responsibility for all elements of building and construction regulation in New South Wales.

The industry would also derive substantial benefits from as a result of lower transaction costs resulting from this 'one-stop-shop' approach to building regulation by the Government.



3.2 Regulatory Functions

Linked to the split of Ministerial portfolios, the regulatory functions relating to the building and construction industry are similarly fragmented in New South Wales (see figure 2 below).

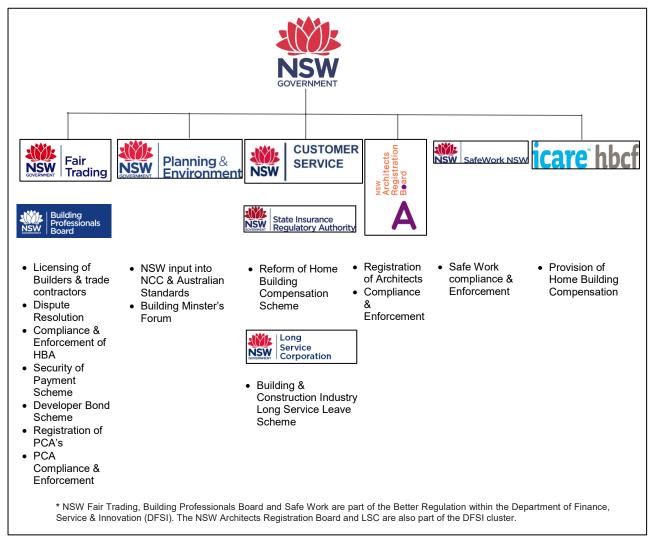


Figure 2 Regulatory functions relating to the building & construction industry in NSW

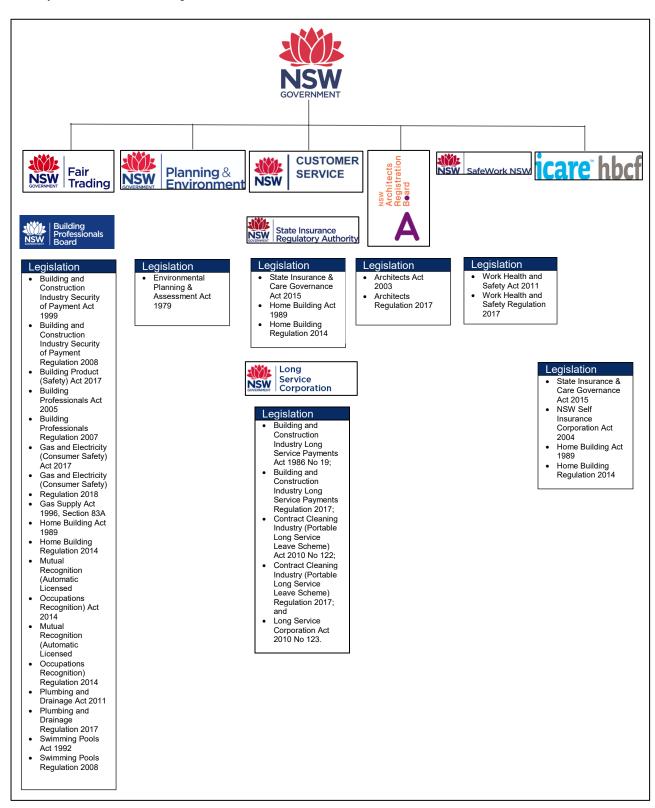
Master Builders believes the current fragmentation of regulatory functions is producing regulatory 'gaps' and suboptimal regulatory outcomes.

Accordingly, there would be substantial and appreciable benefits to the NSW Government in consolidating all of the regulatory functions within a single independent building commission. More on this in Chapter 4.



3.3 Regulator Responsibilities and Model

The legislative responsibilities of each regulator involved in the regulation of the building and construction industry in NSW are set out in figure 3 below.



 $\textbf{Figure 3} \ \text{Legislative responsibilities of regulators relating to the building \& construction industry in NSW} \\$



Figure 4 below sets out the number of employees, operating budgets and revenue generated by each regulator involved in regulating the building and construction industry in New South Wales.

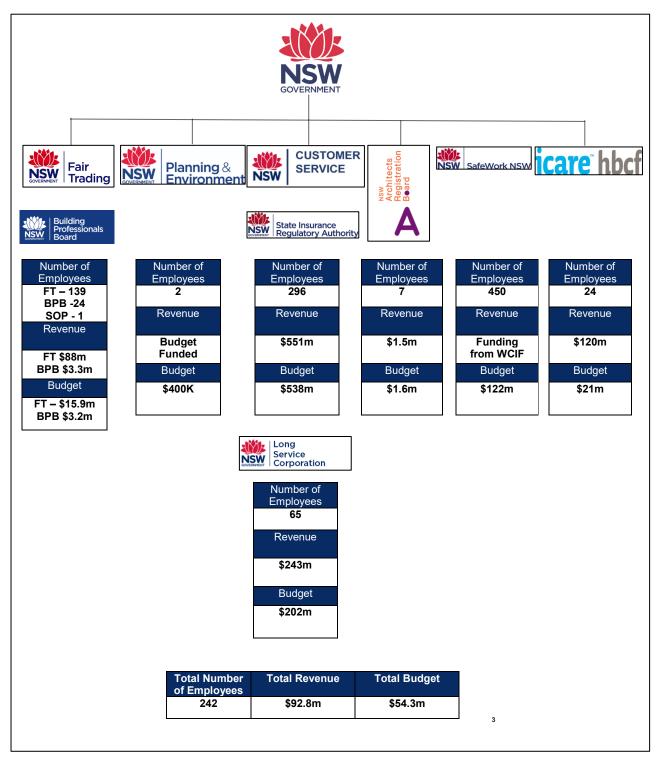


Figure 4 Regulator employees, budgets and revenues 4 5 6 7 8 9

As a result of researching NSW Budget papers, departmental and agency annual reports, Master Builders was able to determine that the NSW Government currently derives approximately \$468m in revenue from the NSW building and construction sector. When long service payments are excluded, revenue collected by the NSW Government directly related to regulating the building industry is approximately \$225m per annum.



Our research also shows that approximately 318 EFT (Effective Full-time Equivalent) public servant employees are directly involved in the regulation of the industry. When long service payment budget is excluded, the NSW Government budget spend on regulating the NSW building industry is approximately \$54.3m per annum.

In addition to improving regulatory outcomes, Master Builders is of the view that the establishment of an independent building commission will achieve savings from economies of scale and scope flowing from bringing the currently separate building regulatory functions and entities together.

Bringing together many of the currently separate entities into an independent building commission construct also provides a range of opportunities for ensuring that regulation of the NSW building industry would be non-budget self-funding. More on this in Chapter 5.



4 BETTER OUTCOMES FLOWING FROM IBC'S

4.1 Regulatory Framework in Victoria and Queensland

This paper seeks to compare the regulatory framework in Victoria and Queensland with the current regulatory framework in New Souths to determine the benefits that these jurisdictions are deriving from independent building commissions and authorities and less fragmented approaches to regulation of the building and construction industry in those States.

4.1.1 Ministerial Responsibility

The Ministerial portfolios involved in the regulation of the building and construction industry in Victoria and Queensland are set out in Figures 5 and 6 below.

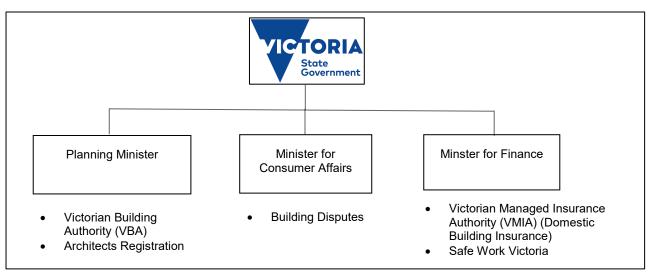


Figure 5 Ministerial portfolio responsibilities relating to the building & construction industry in Victoria

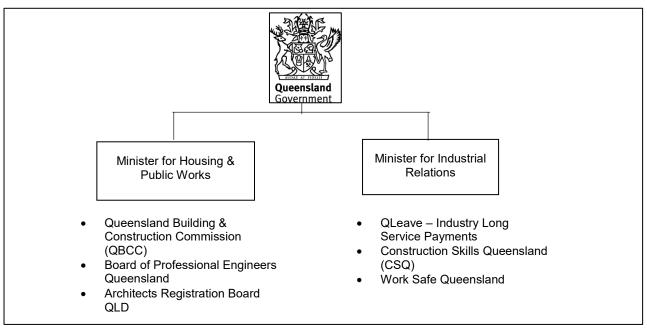


Figure 6 Ministerial portfolio responsibilities relating to the building & construction industry in Queensland



Both Victoria and Queensland have less fragmentation of Ministerial responsibilities relating to regulation of the building and construction industry when compared to New South Wales.

Ministerial responsibilities in Queensland are the most streamlined with the Minister of Housing & Public Works being the primary Minister responsible for the regulation of the building and construction industry in that State.

One of the other significant aspects of the Queensland regulatory approach is the use of a levy attaching to long service payment levy from QLeave for the operation of Construction Skills Queensland (CSQ). CSQ's funding is then applied specifically to building and construction industry training and development programs.

Master Builders believes that introduction of a similar arrangement by the NSW Government would greatly assist in reducing the skills shortages faced by the industry in addition to approving overall performance of industry practitioners leading to better building outcomes.

4.1.2 Regulatory Functions

The legislative responsibilities of each regulator involved in the regulation of the building and construction industry in Victoria and Queensland are set out in Figures 7 and 8 below.

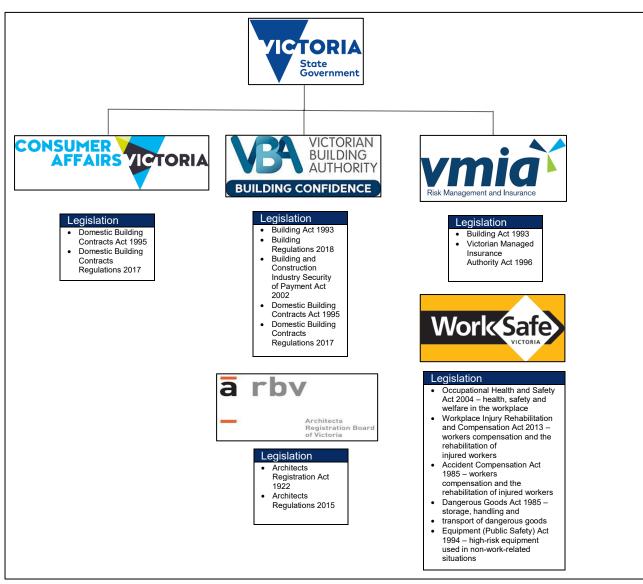


Figure 7 Legislative responsibilities of regulators relating to the building & construction industry in Victoria





Figure 8 Legislative responsibilities of regulators relating to the building & construction industry in Queensland

Both Victoria and Queensland have independent building commissions or authorities that are the primary regulators in those States.

Both States have regulatory frameworks in pace for both engineers and architects and building designers. Where these are not within the respective building commission or authority there a strong memorandums of understanding (MoU's) between the regulatory bodies ensuring practitioner accountability.

Both Victoria and Queensland have a Building Act that consolidates a range of building regulation into a single Act. Master Builders are of the view that there are appreciable benefits from consolidation of various building regulations into a single Act.



The VBA and Consumer Affairs Victoria are partially funded from building permit levies. In establishing an independent building commission in NSW an increase in the existing building consent levy pursuant to section 109 of the *Environmental Planning & Assessment Act 1979* should be considered. More on this in Chapter 5.

4.1.3 Regulator Model

Figures 9 and 10 below set out the number of employees, operating budgets and revenue generated by each regulator involved in regulating the building and construction industry in Victoria and Queensland.

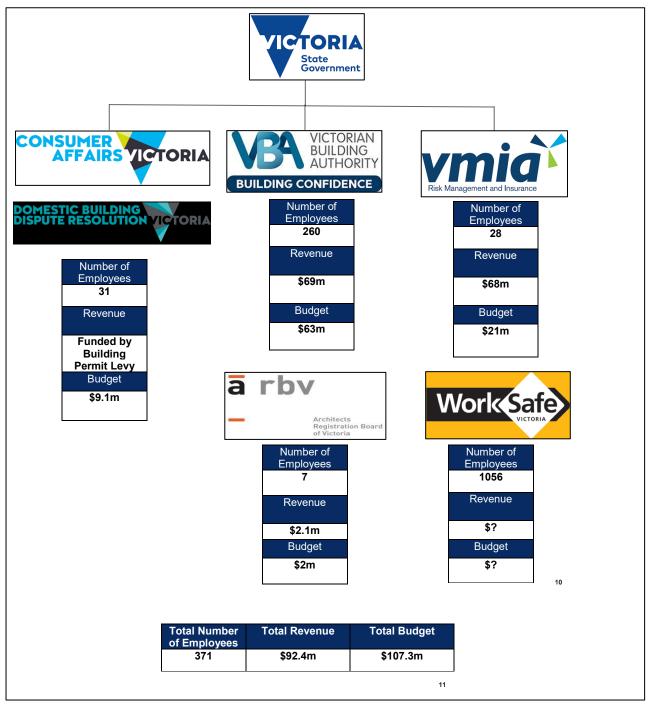


Figure 9 Regulator employees, budgets and revenues in Victoria 12



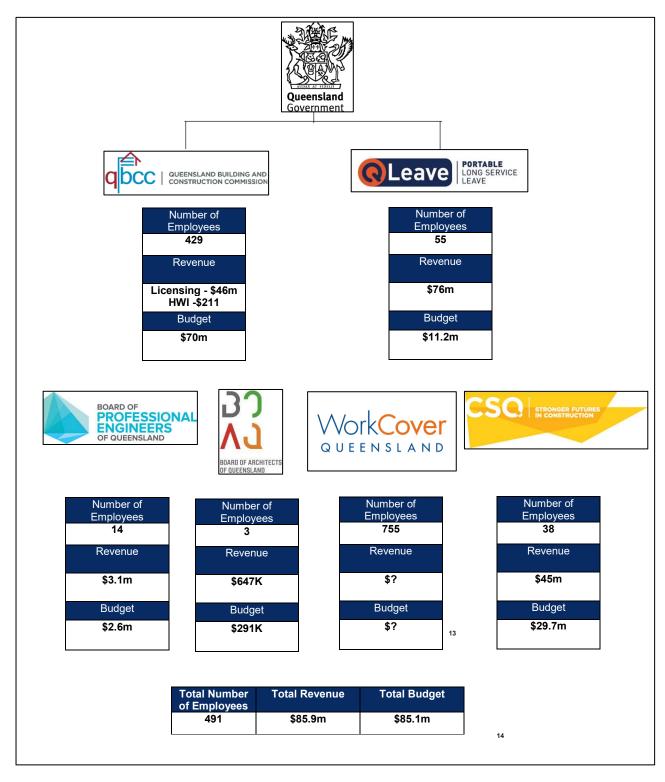


Figure 10 Legislative responsibilities of regulators relating to the building & construction industry in Queensland

In arriving at the totals for revenue and budget for each jurisdiction, revenues relating to home building compensation (domestic building insurance in Victoria and home warranty insurance in Queensland) were not included as these amounts relate to the provision of homeowner protection policies.

Revenue and budgets relating to long service payments and industry training schemes were also not included as these do not directly relate to regulation of the building and construction industry.



Factoring in the above, the comparative analysis indicates that NSW is the highest collector or regulatory revenue from the building and construction industry, yet it has the lowest level of expenditure on regulatory activities and lowest staffing complement (see Table 1 below).

Jurisdiction	Regulatory Revenue	Expenditure on Regulation Activities	Regulator Employees	
NSW	\$92.8m	\$54.3m	242	
Victoria	\$92.4m	\$107.3m	371	
Queensland	\$85.9m	\$85.1m	491	

Table 1 Comparison of regulatory revenue collection, expenditure and employees (2017-18)

Notwithstanding, both Victoria and Queensland have developed funding models whereby their primary regulators (the VBA and QBCC respectively) are non-budget self-funding entities.

Chapter 5 of this blueprint sets out a range of options that the NSW Government can pursue to achieve the same outcome for an independent building commission in NSW.

4.2 Regulatory Outcome Comparison

Amongst other regulatory metrics available, generally speaking a sound means for measuring the effectiveness of a regulatory regime for the building and construction sector would involve:

- 1. the level of complaints and dispute relating to building defects;
- 2. the level of tribunal claims (complaints) relating to building defects; and
- the level of home building compensation (HBC) claims numbers and the size and costs of those claims

In this regard, the analysis undertaken as part of this blue print paper is seeking to test the hypothesis that better outcomes relating to 1 to 3 above are being achieved in those States where ministerial responsibilities are not as fragmented as they are in NSW and independent building commissions or authorities are utilised to consolidate the approach to regulating the building and construction industry.

If the hypothesis is proven correct, then the next step is to understand why these approaches to regulating the industry are delivering better outcomes.

1) Building complaint and dispute outcomes

The number of building complaints and disputes dealt with by State and Territory consumer affairs or building regulators is contained in Figure 11 (below).

The relatively high number of complaints and disputes in Queensland stems from the fact that the building regulator in that State (the Queensland Building & Construction Commission - QBCC) is also the home warranty insurance provider. In what is referred to as a 'first resort' home warranty insurance scheme, when a defect occurs homeowners in Queensland make a complaint to the QBCC and it is either dealt with as a dispute or insurance claim.

Notwithstanding, in real terms, since 2009-10 Queensland and Victoria have experienced a downward trend in the number of building complaints and disputes.



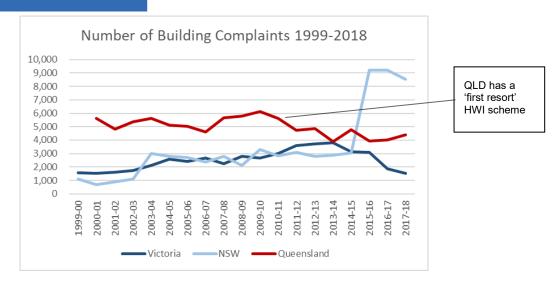


Figure 11 Building complaints and disputes 1999 to 2018.

Trends in complaint and dispute numbers, however, are affected by increases and decreases in the volume of construction in each jurisdiction each year. This influence is removed by deriving the number of complaints and disputes for every 1,000 houses constructed.

After removing the influence of changing construction volumes, the overall trends in complaints and disputes become more apparent. The analysis confirms the downward trend in complaints and disputes in both Queensland and Victoria while there has been a significant increase in complaint and disputes in New South Wales, particularly since 2014-15 (Figure 12).

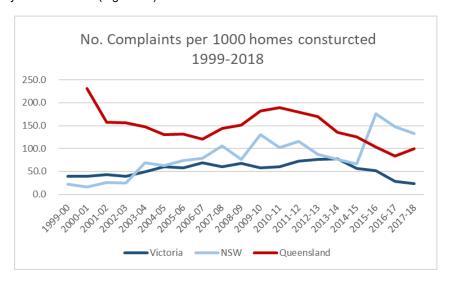


Figure 12 Building complaints and disputes per 1,000 homes constructed (1999 to 2018).

2) Building disputes with Tribunals

The worst or most protracted building disputes ultimately end up being dealt with by courts and Tribunals. The number of building disputes dealt with by tribunals in New South Wales, Victoria and Queensland are set out in figure 13 below.

While most jurisdictions across Australia experienced downward trends in relation to Tribunal building disputes (claims) over the data collection period, since 2007-08 New South Wales has experienced the most pronounced decrease (see Figure 7 below).



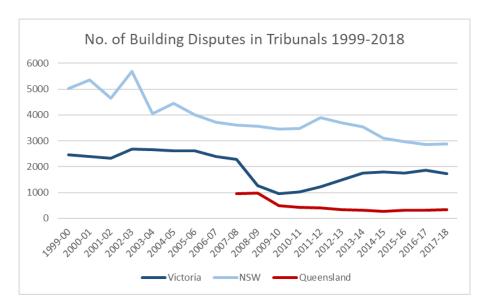


Figure 13 Tribunal Building Defect Disputes Australia 1999-18

While data indicates a downward trend in terms of the number of building disputes being determined by tribunals, comparatively, New South Wales has always had a higher number of building disputes dealt with by tribunals. This is more evidence when the volume of building activity is taken into account as set out within figure 14 below.

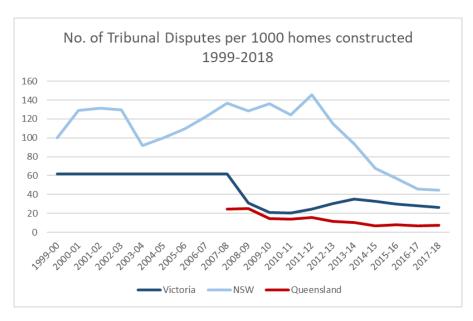


Figure 14 Tribunal Building Defect Disputes Australia 1999-18

The decline in disputes being dealt with by tribunals in both Queensland and New South Wales particularly since 2006 can be attributed to introduction of free early dispute resolution services by the regulators in those jurisdictions. In 2017 Victoria established Domestic Building Dispute Resolution Victoria (DBDRV) which has already seen a reduction in building disputes being dealt with by the Victorian Civil & Administrative Tribunal (VCAT) in that State. These outcomes emphasise the critical importance of an early dispute resolution service with the regulatory framework for the building and construction industry.



3) Home Building Compensation outcomes

In the absence of defective remediation cost data from builders, home building compensation outcomes perhaps provide one of the best indicators of the effectiveness of a jurisdiction's regulatory regime. Before examining the data in relation to home building compensation (HBC) it is important to firstly understand the difference between the schemes that operate in each jurisdiction.

Understanding HBC data

When viewing HBC data an appreciation of the nature of the insurance product and how it is provided in each jurisdiction is required.

Firstly, it is important to understand that terminology used across jurisdictions varies. In NSW the product is called 'Home Building Compensation' (HBC). In Queensland the product is still referred to as 'Home Warranty Insurance' (HWI) and in Victoria the product is referred to as 'Domestic Building Insurance' (DBI).

In NSW HBC is provided by the NSW Government via iCare HBCF. In Victoria, DBI is provided by the Victorian Managed Insurance Authority (VMIA) and in Queensland HWI is provided by the regulator, the Queensland Building & Construction Commission (QBCC) For simplicity, the term 'Home Building Compensation' will be used throughout this document to refer to the relevant insurance product in each jurisdiction.

The HBC scheme in Queensland is referred to as a 'first resort' scheme whereas the scheme in NSW and Victoria are referred to a 'last resort'. The key difference between first and last resort scheme is that homeowners within last resort schemes are only able lodge claims under their HBC policy if their builder:

- dies;
- disappears;
- becomes bankrupt or insolvent; or
- has their licence suspended because of an outstanding court/tribunal money order.

Conversely, the Queensland 'first resort' scheme enables homeowners who suffer losses because of defective building work to lodge a claim under their HBC policy regardless of the status of the builder. For this reason, the number of complaints and claims the QBCC is typically higher than the other jurisdictions.

Finally, the HBC product provides homeowners with protection against defects for several years after the construction of their home is completed. Most jurisdictional HBC products provide cover for up to six years and homeowners can lodge claims at any time within that period.

For this reason, data relating to HWI claims is said to be significantly 'lagged' and not fully mature until after at least 7 years. Accordingly, any analysis of HWI data should focus on the claims experience of fully matured data.

HBC claims in Victoria, NSW and Queensland since 1999

The number of HBC claims, average claim costs and claims costs per 1000 homes constructed in NSW, Victoria and Queensland since 1999 are set out in Table 2 below.



	Victoria				N:	SW				QLD		
	Claims	%	Ave cost per claim	Cost per 1000 homes	Claims	%	Ave cost per claim	Cost per 1000 homes	Claims	%	Ave cost per claim	Cost per 1000 homes
Failure to												
commence	189	2.30%	\$18,460	\$4.49	248	3.89%	\$23,310	\$9				
Failure to complete	1,918	25.20%	\$60,806	\$150	1700	26.65%	\$83,699	\$227	4,722	20.76%	\$22,989	\$187
Structural defect	3,117	52.70%	\$40,085	\$161	3333	52.25%	\$101,001	\$536	11456	79.24%	\$21,336	\$336
Other (non- structural) defect	1,169	19.30%	\$26,795	\$40	424	6.65%	\$52,073	\$35	6562			
Total	6,393	100.00%	\$43,232	\$356	5705	100.00%	\$88,831	\$807	22740	100%	\$13,342	\$523

Table 2 Claims outcome data for NSW, Vic and Qld 2002-18

First resort HBC scheme

Notably, the number of HBC in Queensland is much higher than NSW and Victoria. The number of HBC claims received over the period is slightly higher in Victoria than NSW, however, the average claims costs in both Victoria and Queensland are significantly lower than NSW.

NSW	VIC	QLD
\$88,831	\$43,232	\$13,342
	-48%	-150%

Table 3 Home Building Compensation average claim size 2002-19

The average cost of claims in Victoria is more than 50% lower than NSW and Queensland's cost of HBC claims is 150% lower than NSW.

When construction volumes are taken into account the HBC claims cost per 1000 homes in NSW is significantly higher the Queensland's 'first resort' scheme outcomes. The difference between the HBC claims cost outcomes in NSW in comparison with a more similar HBC scheme, such as Victoria is even more significant (see figure 15 below).

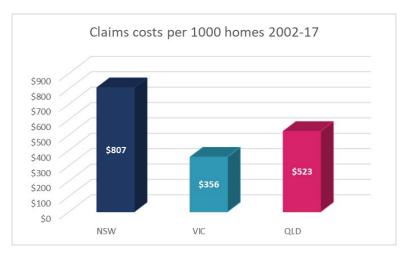


Figure 15 HBC claims in Victoria, NSW and Queensland 2002-03 to 2017.



While having the highest number of claims, one of the most distinguishing features of the Queensland HBC scheme is the comparatively low average claim size (as the defects are dealt with during construction, they are cheaper to resolve).

The overall performance of each of the HBC scheme from a perspective of total cost is set out within Table 4 below.

	NSW Net incurred costs (\$000)	VIC Net incurred costs (\$000)	QLD Net incurred costs (\$000)
Failure to commence	\$5,780,882	\$3,489,000	
Failure to complete	\$142,288,036	\$116,626,000	\$108,544,040
Structural defect	\$336,635,477	\$124,946,000	\$128,363,720
Other (non-structural) defect	\$22,079,122	\$31,323,000	\$66,479,094
Total	\$506,783,517	\$276,384,000	\$303,386,854

Table 4 Total HBC claims costs NSW, Victoria and Queensland 2002-03 to 2016-17.

The total cost of the HBC scheme in NSW has been almost double that of Victoria for the same period and is significantly higher than the Queensland 'first resort' scheme. What makes this outcome more notable is that ABS statistics show during the corresponding period there was approximately 150,000 more residential construction completions in Victoria than NSW (see Table 5 below)

NSW	VIC	QLD
627,957	776,989	580,077

Table 5 Total residential construction in each jurisdiction 2002 to 2017

Perhaps most significantly, the HBC claims data reveals a much higher level of claims attributable to 'major defects' in NSW when compared to Victoria and Queensland (see figure 16 below).

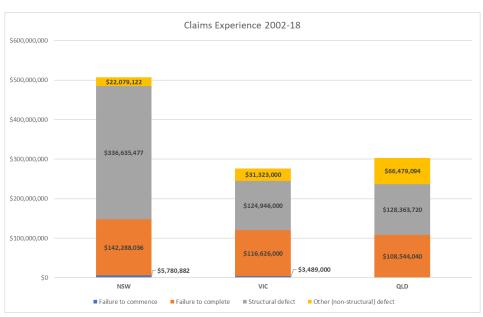


Figure 16 Total HBC claims cost comparison breakdown NSW, Victoria and Queensland (2003-04 to 2016-17).



HBC Premiums in NSW, Victoria and Queensland 2019

HBC premiums in NSW now represent over 1% of the contract price for a single dwelling and in excess of 3% for multi-dwellings. Premiums have risen by 60% over the past two years with iCare indicating that a further premium increase will occur by the end of the 2018-19 financial year.

Conversely, in 2018 the Victorian Managed Insurance Authority (VMIA) actually reduced premiums in Victoria by 23%. ¹⁵

As a result of the claims outcomes outlined above, the HBC premiums in NSW are now significantly higher than in Victoria and Queensland (see Table 6 below)

Jurisdiction	Premium for \$500,00 single dwelling (2019)	% Difference
NSW	\$5,695.25	
Victoria	\$3,158	-44.5%
Queensland	\$4,883.25	-14.3%

Table 6 HBC premium comparison

In summary, the data relating to HBC claims costs and premium outcomes appear to mirror those relating to building complaints and disputes. A summary of the comparison made of the key building regulatory performance indicators is set out within table 7 below.

	Key Performance Indicator	NSW	Victoria	Queensland	Average Total Difference (%)
1	Building Complaints 2017-18 (per 1000 homes)	132.8	23.2	99.8	
	Difference in Outcome (%)		82.5%	24.9%	53.7%
2	Tribunal Disputes 2017-18 (per 1000 homes)	45	26	8	
	Difference in Outcome (%)		42.2%	82.2%	62.2%
3	Tribunal Dispute Costs 2017-18	\$14,000,000	\$9,300,000	\$2,440,000	
	Difference in Outcome (%)		33.6%	82.6%	58.1%
4	Home Building Compensation Premiums Collected 2017-18	\$130,000,000	\$68,800,000	\$82,800,000	
	Difference in Outcome (%)		47.1%	36.3%	41.7%
5	Home Building Compensation Claims Costs 2002-18	\$506,783,517	\$276,384,000	\$304,070,110	
	Difference in Outcome (%)		45.5%	40.0%	42.7%
6	Home Building Compensation Premiums (2017-18) for \$500K dwelling	\$5,695.25	\$3,158	\$4,883.25	
	Difference in Outcome (%)		44.5%	14.3%	29.4%

Table 7 HBC premium comparison

48.0%

The data unequivocally indicates that better outcomes with respect to complaints, disputes and home building compensation are being achieved by Victoria and Queensland. An average of the differences in outcomes being achieved in Victoria and Queensland compared to that of NSW suggests that the other jurisdictions are achieving outcomes almost 50% better than NSW.

Given the conclusive outcome of the comparative analysis undertaken, the next section of the blueprint looks to explore the possible reasons attributable to those jurisdictions achieving the better building outcomes identified. While reducing ministerial fragmentation is important, the next section of the paper will take a closer look at the independent building commissions and authorities in Victoria and Queensland in an attempt to identify key success factors.



4.3 More detail regarding the VBA and QBCC

4.3.1 The Victorian Building Authority (VBA)

In Victoria the Victorian Building Authority (VBA) is the primary regulator of the building and construction industry in that State. The VBC replaced its predecessor the Victorian Building Commission in 2010-11.

The VBA is a statutory authority that is governed by a Board of eight Commissioners. It is an independent authority responsible for regulating the building and construction sector excluding Architects. It does not administer Victoria's domestic building dispute resolution service or domestic building insurance. The authority is non-budget funded deriving its revenue from primarily licensing fees and building permit levies. The structure of the VBA is set out in figure 17 below.

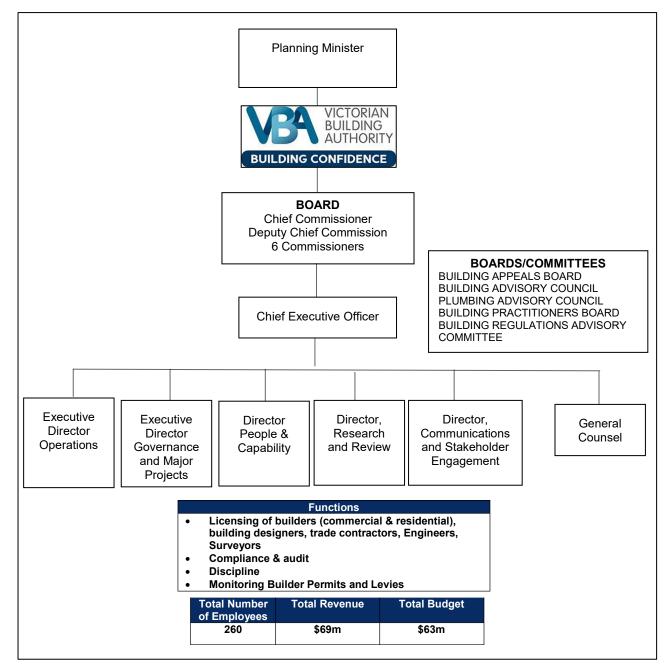


Figure 17 Structure of the Victoria Building Authority.



The VBA's Board of Commissioners and representatives on its appeals and advisory councils and committees are all appointed by the Minister for Planning. The vast majority of Commissioners and council members are active in the building industry in Victoria.

4.3.2 The Queensland Building & Construction Commission (QBCC)

In Queensland the Queensland Building & Construction Commission (QBCC) is the primary regulator of the building and construction industry in that State. The QBCC replaced its predecessor the Queensland Building Authority in 2013.

The QBCC is a statutory authority that is governed by a Board of seven directors. It is an independent authority responsible for regulating the building and construction sector excluding Engineers and Architects. Unlike all other jurisdictions the QBCC administers Queensland's home building compensation (home warranty insurance) scheme. The QBCC is non-budget funded deriving its revenue from primarily licensing fees and surplus earned premium from its HWI scheme. The structure of the QBCC is set out in figure 18 below.

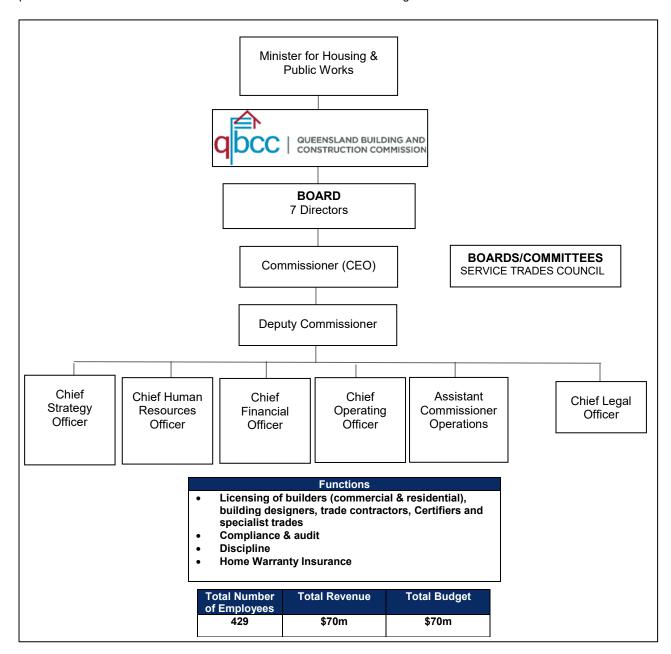


Figure 18 Structure of the Queensland Building & Construction Commission.



The members of QBCC's Board and representatives on its Services Trades Council are all appointed by the Minister for Planning. The vast majority of Commissioners and council members are active in the building industry in Victoria.

A significant point of difference for the QBCC is its administration of Queensland's home warranty insurance scheme. As both the regulator and HWI provider the QBCC is incentivised to ensure that claims costs are minimised via its compliance, dispute resolution and audit inspection activities.

Its administration of home warranty insurance has enabled Queensland to have the only sustainable and profitable scheme in Australia. As a result of its effective stewardship of the HWI scheme the QBCC has over \$300m under investment.

4.4 The better outcomes delivered by Independent Building Commissions

Having researched and understood the outcomes delivered by the VBA and QBCC, given the significantly better building outcomes achieved by the QBCC, Master Builders is of the view that the NSW Government should adopt the best aspects of the QBCC regulatory model in implementing an independent building commission in NSW.

The table below outlines the key elements of the VBA and QBCC that have allowed Victoria and Queensland to achieved comparatively better building outcomes than NSW.

Jurisdiction	Element	Benefits
Victoria	One senior Minister (Minister for Planning) primarily responsible for building and construction regulation	Quicker and more agile policy development by government in response to emerging issues Single point of contact for industry with Government
	Board of Governance – Commissioners appointed from the industry by the Minister	Strategic direction setting for the VBA is agile and responsive to emerging industry issues VBA is more closely linked and informed by the industry In keeping with best practice regulatory principles, the industry has a say in how it will be regulated
	Boards and Committee – appointed by the Minister	Ensures that each section of the industry is able to contribute to setting the direction of the VBA Enables the VBA to be more responsive to emerging issues In keeping with best practice regulatory principles, the industry has a say in how it will be regulated Improved policy development Improved targeting of areas of poor compliance
	Registration and regulation of Surveyors (certifiers)	Enables the VBA to ensure that building approval and consents are compliant with the Building Act
	Oversight of building permit system & levy	 Enables the VBA to be notified of the location and type of all building work in Victoria Increases its audit capability Increase ability to monitor the performance of Surveyors Provides the VBA with a major revenue source



Jurisdiction	Element	Benefits
Jansaiction	Regulation of Building Designers and Engineers	The VBA is able to more
		effectively monitor practitioner compliance and ensure accountability
	Licensing of commercial and residential builders	Ensure that poorly performing residential builders cannot enter into commercial sector
	Security of Payments	 Provides the VBA with an early indication of a builders impending insolvency
	A Building Act that consolidates much of the regulatory framework into one piece of legislation	Simpler and easier for industry to understand compliance requirements
Queensland	One senior Minister (Minister for Housing & Public Works) primarily responsible for building and construction regulation	 Quicker and more agile policy development by government in response to emerging issues Single point of contact for industry with Government
	Board of Governance – Members appointed from the industry by the Minister	 Strategic direction setting for the QBCC is agile and responsive to emerging industry issues QBCC is more closely linked and informed by the industry In keeping with best practice regulatory principles, the industry has a say in how it will be regulated
	Boards and Committee – appointed by the Minister	 Ensures that each section of the industry is able to contribute to setting the direction of the QBCC Enables the QBCC to be more responsive to emerging issues In keeping with best practice regulatory principles, the industry has a say in how it will be regulated Improved policy development Improved targeting of areas of poor compliance
	Administration of Queensland Home Warranty Insurance Scheme	 Perhaps the most significant feature of the regulatory model in Queensland As both the regulator and HWI provider the QBCC is incentivised to ensure that claims costs are minimised via its compliance, dispute resolution and audit inspection activities. Provides the QBCC with a funding source so that it is self-funding in all respects The QBCC has over \$300m under investment that can be utilised for improving the regulatory framework in Queensland and assisting with the continual professional development of practitioners
	Registration and regulation of Certifiers	Enables to QBCC to ensure that building approval and consents are compliant with the Building Act



Jurisdiction	Element	Benefits
	Receipt of building notifications under the Building Act	 Enables the QBCC to be notified of the location and type of all building work in Queensland Increases its audit capability Increase ability to monitor the performance of Surveyors Provides the QBCC with a revenue source
	Regulation of Building Designers	The QBCC is able to more effectively monitor practitioner compliance and ensure accountability
	Licensing of commercial and residential builders	Ensure that poorly performing residential builders cannot enter into commercial sector
	Administration of (BCIPA) Security of Payments	 Enable to QBCC to monitor trends in adjudication of SOP requests Provides the QBCC with an early indication of a builders impending insolvency
	A Building Act that consolidates much of the regulatory framework into one piece of legislation	Simpler and easier for industry to understand compliance requirements

Table 8 Elements of IBC's that produce better building outcomes

The analysis outlined above clearly indicates that better building outcomes are achieved by independent building commissions that, by virtue of their Governance and Committee frameworks are more connected to the industry that they regulate thereby making them more agile and responsive to emerging industry issues.

A good example of this is the QBCC in Queensland as the first jurisdiction to implement a regime and a legislative framework for non-conforming building products. In addition to this, the QBCC had the financial capacity to carry out inspections of all properties identified as possibly having non-conforming cladding material.

Similarly, Victoria was the first State to also establish a grant funding arrangement to enable owners' corporations to rapidly remediate non-conforming cladding issues.

Better outcomes are also being achieved by IBC's as a result of their greater coverage of practitioners who operate in the industry. The VBA and QBCC benefit significantly from licensing and regulating commercial and residential builders in addition to engineers and building designers.

IBC's being notified of all building work in their jurisdiction is also highly beneficial to their roles as regulators of the building and construction industry.

However, the most significant better building outcomes were derived by the QBCC who also administers Queensland's home building compensation scheme. The QBCC's enviable financial position together with its sustainable and profitable insurance scheme clearly demonstrate that the best building outcomes are achieved from having the regulator as the same entity providing home building compensation.



5 NSW BUILDING & CONSTRUCTION COMMISSION BLUEPRINT

5.1 Ministerial Responsibility

Based upon the appreciable benefits of streamlining Ministerial portfolio responsibilities relating to regulation of the building and construction industry, Master Builders recommends adopting an approach similar to that of Victoria whereby the Minister for Planning is the primary Minister responsible for building and construction regulation in NSW (see figure 19 below).

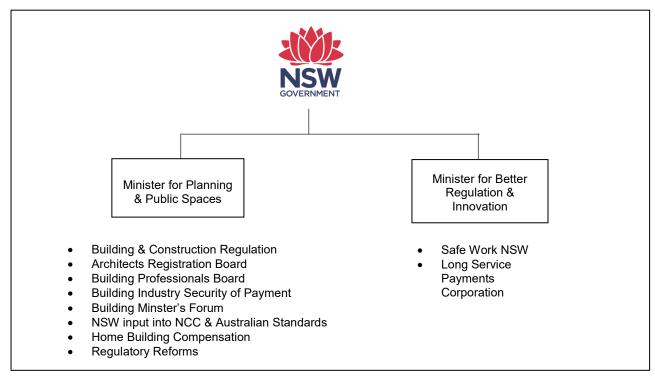


Figure 19 Recommended Ministerial portfolio responsibilities relating to the building & construction industry in NSW

5.2 Regulatory Functions

Given the superior regulatory building outcomes being achieved by the QBCC in Queensland, Master Builders recommends that the NSW Government establish an NSW Building & Construction Commission (NBCC) by bringing to together a range of currently separate regulatory functions within the ministerial responsibility of the NSW Minister for Planning and Public Spaces.

The NBCC would be a statutory authority with its Board of Governance reporting directly to the Minister for Planning and Public Spaces.

As is the case in Victoria, the newly created NBCC would also be made responsible for implementing the Government's reforms relating to engineers and the signing off of building design.

As the Queensland experience has clearly shown, bringing the provision of home building compensation under the control of the newly established NSW Building & Construction Commission will result in the provision of a long-term sustainable home building compensation scheme.



By establishing an NBCC (see figure 20 below) as outlined, the Government will significantly:

- enhance regulatory performance;
- · reduce the financial risks faced by homeowner and investors;
- reduce non-productive re-work costs for the building industry thereby improving housing affordability;
- derive superior building outcomes for the people of NSW;
- improve the community's confidence to invest in building new homes;
- improve the provision of HBC protection to homeowners and produce a sustainable HBC scheme

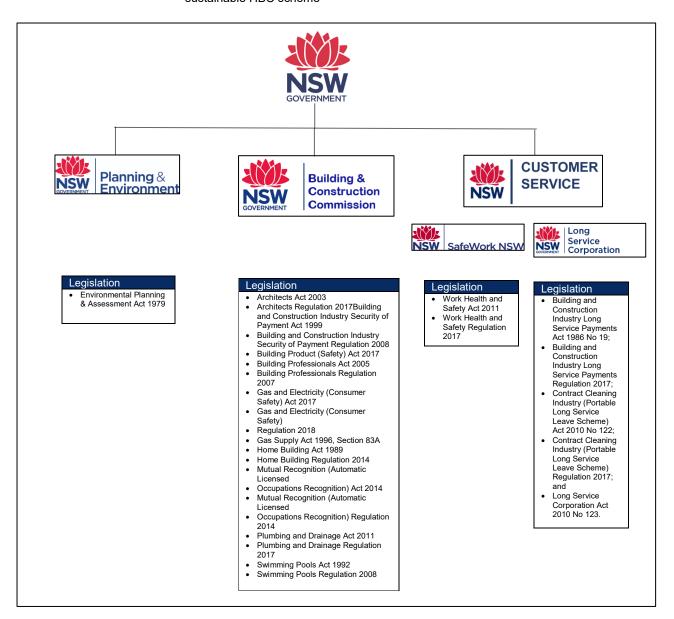


Figure 20 Legislative responsibilities of regulators relating to the building & construction industry in NSW



5.3 Governance

In establishing an NBCC, Master Builder's recommends that the NSW Government adopt a governance model which contains the best elements of both the Victorian and Queensland approaches (see figure 21 below).

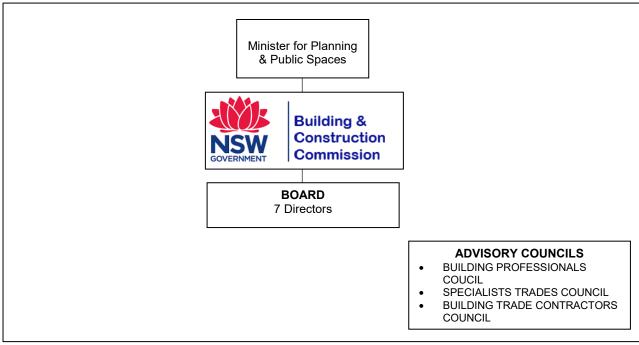


Figure 21 Legislative responsibilities of regulators relating to the building & construction industry in NSW

Under the Governance model proposed by this blueprint document, the Minister would appoint seven directors to the Board of the NBCC. The Board would be, amongst other things, be responsible for:

- deciding the strategies and the operational, administrative and financial policies to be followed by the commission;
- ensuring the commission performs its functions and exercises its powers in a proper, effective and efficient way;
- o providing guidance and leadership to the commissioner;
- o providing guidance and leadership to the Councils;
- o advising the Minister on issues affecting
 - i. the building industry; and
 - ii. consumers: and
 - iii. the administration of regulatory Acts and Regulation; and
 - iv. the administration of the commission;
 - v. advising the Minister about unfair or unconscionable trading practices affecting security of payments to contractors and subcontractors;
 - vi. consulting the building industry and its consumers and advancing their interests, consistently with the objects of this Act.

The governance structure for the proposed NBCC would also include three industry advisory Councils. The advisory councils would ensure that each building practitioner group had a say in the setting of the strategic direction of the NBCC, in addition to providing the NBCC Board and Minister with accurate and timely information regarding emerging issues likely to seriously impact negatively on the building and construction industry and consumers. ¹⁶



5.4 Structure

A high-level structure for the proposed NBCC is set out within figure 22 below.

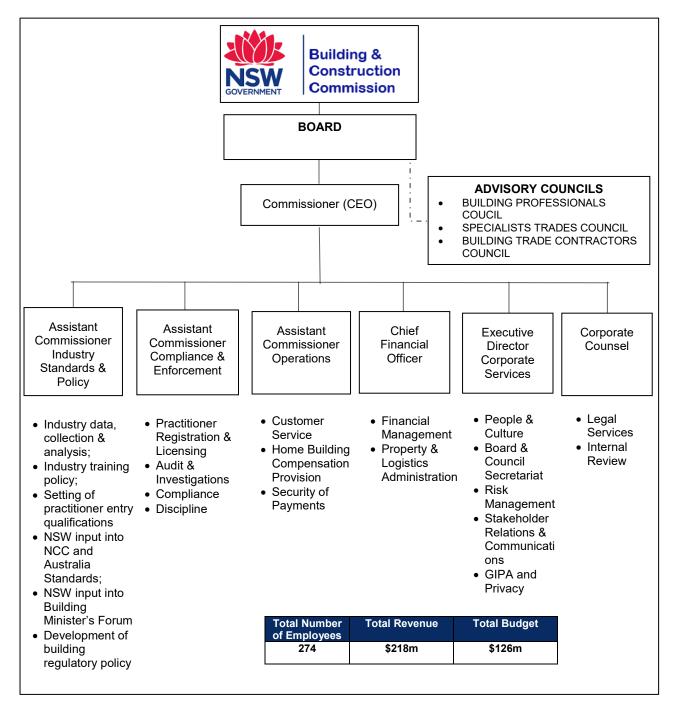


Figure 22 Proposed structure for an NBCC.

The proposed structure for the NBCC is based upon the structures of the Victorian VBA and Queensland QBCC. Given the low premiums and long-term sustainability of the home building compensation scheme in Queensland the proposed structure set out within this blueprint brings together all regulatory functions and administration of the HBC scheme in NSW.



The proposed structure of the NBCC would require 274 full-time equivalent (FTE) staff. The staffing compliment recommended is similar to that of the Victorian VBA, although allowance has also been made of the staffing of a home building compensation branch within the NBCC.

A copy of the staffing levels together with the employee costings for the commission is set out within Appendix A.

5.5 Costing

Staff costs

The staffing costs for the proposed NBCC will be approximately \$40m per annum. These costs have been developed using the latest public sector salaries for the Senior Executive Service and the NSW Crown Employees Award.

Operational Costs

The operating costs for the NBCC, excluding home building compensation claims costs, will be approximately \$18m. A breakdown of the operating costs for the NBCC are set out within Appendix B. These costings are reflective of the costs incurred by the VBA and QBCC.

The blueprint has assumed a continuance of existing HBC claims cost which totalled \$108m in 2017-18.

Inclusive of HBC claims and claims management costs, the total annual operational cost of the NBCC will be approximately \$126.6m (see Appendix C)

As mention previously, bringing together the regulatory compliance functions of the NBCC with the administration of the HBC scheme will result in lower claims costs. Analysis outlined early in this document shows that, although it has a 'first resort' HBC scheme, the total claims costs in Queensland are 40% lower than in NSW.

For the purpose of forward estimates, the blueprint will assume that merging these functions will derive a 20% reduction in claims exposures over future years. Like the QBCC, the surplus of HBC revenue can either be used to offset over expenditure by the NBCC or be invested.

Start-up Capital Funding

Utilising existing ICT and licensing platforms the establishment of the NBCC will requirement an initial capital commitment from the NSW Government of approximately \$20m (see table 9 below).

Capital expense items	\$
Accommodation fit out	\$14m
ICT infrastructure	\$3.7m
New plant & equipment	\$2.3m
	\$20m

 Table 9 Initial Capital commitment required to establish the NBCC.

Future capital commitments as set out within forward projections contained within Appendix D will be funded from surpluses generated by the NBCC



5.6 Funding

There are a number of options available to the NSW Government to fund the NBCC. Some of these options are set out below:

Option 1:

- a) Bring together all existing registration and licensing revenue;
- b) Additional licensing revenue from the registration of other building practitioners;
- c) Allow the NBCC to retain all licensing revenue;
- d) Additional revenue from compliance notifications from building practitioners; and
- e) HBC scheme surpluses

a) Bring together all existing registration and licensing revenue

The NSW Government currently raises approximately \$93m in revenue from the building and construction industry in NSW. A substantial proportion of this revenue comes from the registration and licensing of building practitioners.

b) Additional licensing revenue from the registration of other building practitioners

The NSW Government has indicated its intention to introduce a registration regime for other building practitioners (engineers and building designers/draft people). Utilising data from Victoria regarding the number of engineers and building designers/drafts people registered in the State, the blueprint has estimated that licensing of these additional building practitioners would raise an additional \$2.3m p.a. (see Appendix E)

c) Allow the NBCC to retain all licensing revenue

Master Builders understands that currently only 40% of the building contractor licensing revenue collected is remitted back to the Department of Finance, Services & Innovation (DFSI) from NSW Treasury.

As is the case in Victoria and Queensland, this blueprint recommends that the NBCC retain all registration and licensing revenue collected.

As a result of allowing the NBCC to retain all building practitioner registration and licensing revenues it will derive revenue of approximately \$82m (see Appendix F).

d) Additional revenue from compliance notifications from building practitioners

The NSW Government has also indicated its intention to introduce a compliance notification regime whereby building designers, including engineers, will be required to declare that their plans comply with the NCC and also requiring builders to declare that buildings have been built in line with those plans.

Utilising ABS data relating to the number of new residential buildings built in NSW, the blueprint has estimated that licensing of these additional building practitioners would raise an additional \$2.2m p.a. (see Appendix G)

e) HBC scheme surpluses

Statements made by the NSW Government and iCare's Annual Report 2017-18¹⁷ indicate that the NSW Treasury has agreed to reimburse iCare HBCF for previous losses under the scheme.

This blueprint recommends the transfer of the administration of the HBC scheme to the newly created NBCC as long as the agreement of Treasury to fund previous losses sustained by the scheme remains.

Premium levels have risen to sustainable levels over the past two years and Master Builders understands that iCare HBCF is currently seeking a further premium increase that will enable it to have a positive return to capital in compliance with the NSW State Insurance Regulatory Authority's (SIRA) prudential guidelines.

The continuance of NSW Treasury's agreement to off-set previous claims deficiencies, new premium pricing levels together with the NBCC's focus on reducing the risks associated with HBC claims will enable the NBCC to produce future surpluses with which to either fund its operations or invest (see Appendix H).

Implementation of funding option 1 will allow the NBCC to derive \$219m in revenue per annum.



Option 2:

As above, minus the transfer of the HBC scheme Administration.

Should the Government not elect to merge the administration of the HBC scheme with the newly established NBCC, registration, licensing and service fees would generate approximately \$97m in revenue.

This level of revenue would still enable the NBCC to be self-funding and produce surpluses (see Appendix H(a))

Option 3:

As above but utilising an increase in the building consent levy under the Environmental Planning & Assessment Act 1979 as a funding source.

Over 60% of the operations of the Victorian VBA are funded from building permit (consent) levies (\$37.5m in 2017-18)¹⁸

As the primary purpose of the VBA is to protect homeowners the use of building permit levies is viewed as a more appropriate funding source for the building regulator in that State. From this perspective the building permit levies directly accrue to the beneficiaries of the regulatory functions of the VBA which is viewed as being preferable to the funding of the VBA via registration and licensing fees.

Funding under this model is also spread over a broad base and increases have significantly less impact on building costs for developers and homeowners.

Should the NSW Government wish to adopt the Victorian Government's funding model it could be easily implemented via an adjustment of the building consent levy set out within clause 25K of the *Environmental Planning & Assessment Regulation 2000*.

The EP&A Act and Regulation set out the requirements for a levy to paid by the builder (maximum of 1% of the cost of construction) as part of the building consent process. The *Building and Construction Industry Long Service Payments Act 1986* requires the payment of a levy of 0.6% of the value of the building project.

As a result of the levy, for the year 2017-18 the Long Service Payments Corporation derived revenue of \$194m.

An increase of in the levy of only 0.1% would produce an additional \$32m in revenue that could be used to fund the operations of the NBCC (see Appendix I).



6 COST BENEFIT ANALYSIS

Regulation is a powerful tool capable of contributing to achieving a wide range of public policy goals. However, as regulation constrains the decisions taken by free actors in the market and has the potential to lead to substantial unintended distortions, over the past decade most governments around the world have adopted deregulatory stances.

The Organisation for Economic Co-Operation & Development (OECD) rightly argues that:

"Government intervention should be based on clear evidence that a problem exists, and that government action is justified, given: the values at stake and current government policies; the likely benefits and costs of action (based not on "perfect" government, but on a realistic assessment of government effectiveness); and alternative mechanisms for addressing the problem. Markets should always be considered as an alternative to government action and the capacity of the private sector and individuals to deal with the problem should be assessed."

Australia has followed the world trend with all governments across Australia adopting the Council of Australian Governments' (COAG) guiding principles of "minimum necessary regulation". The Guiding Principle document states that there should be a presumption against the use of regulation.

The COAG document suggests that for regulatory intervention to be justified, it is insufficient to merely establish that a problem exists. It must be established that the size of the problem is sufficient to warrant government action. And, most importantly, it must be established that regulatory action is likely to yield benefits that are greater than the costs entailed and that there are no other, less intrusive, measures than regulation that are likely to be able to achieve the ends sought.

In keeping with the COAG principles most Australian governments have established efficiency commissions or better regulation offices that oversee the preparation of Regulatory Impact Statements (RIS's) or Legislative Impact Assessments (LIA's) which assess any new proposed regulation against the COAG and OECD principles.

The value of any RIS or LIA, and the cost- benefit analysis that is undertaken as part of the process, is completely dependent upon the statistical and financial data collected for analysis. In many instances, accurate statistical and financial data is readily available for analysis. However, this has not been the case for the building and construction industry.

For the most part, collecting accurate and reliable data pertaining to the building and construction industry is extremely difficult, if not impossible in some instances.

The States and Territories differ quite substantially in terms of the scope of the licensing (registration) requirements they adopt and consumer protection mechanisms they provide, particularly in terms of dispute resolution and home (builders) warranty insurance. Significant changes in dispute resolution and home (builders) warranty schemes across the country over the past two decades has fragmented data sets and made data difficult to locate.

For this very reason, many RIS and LIA processes relating to the building and construction sector have had little choice but to utilise limited, small sample size, 'indicative' data sets (typically limited home building compensation claims data) to conduct the cost–benefit analysis of any proposed regulation being considered.

While substantially accurate regarding the likely costs of any proposed regulatory change, RIS and LIA processes conducted in this way typically significantly underestimate the potential social and economic benefits of any proposal for regulatory change. And, for this reason, many sound proposals for regulatory change in the building and construction sector are not proceeded with.

In acknowledging and understanding this problem, the blueprint commissioned by the Master Builders brings together the relevant data with a view to assisting the NSW Government with its regulatory assessment processes.

Research conducted over the past two decades in Australia and overseas, together with the data collected, strongly support the need for further regulation of the building and construction sector in NSW. Comparative analysis of building outcomes being achieved in Victoria and NSW strongly supports Master Builder's proposal for the establishment of an independent building commission in NSW.



Further regulatory reform of the building and construction industry in NSW inclusive of the establishment of an independent building commission will substantially reduce the incidence of defective work, insurance claims, unproductive re-work and, most importantly, reduce the cost of construction thereby making home ownership more affordable.

6.1 UNDER-REGULATION PRESENTS UNNECESSARY COSTS FOR BUILDER & HOMEOWNERS

As outlined above, occurrences of defective residential building work in NSW are resolved in one of two ways. They are either rectified by the builder (otherwise known as re-work) or rectified by another builder and paid for by a home building compensation provider.

No matter how the defective building work is rectified, the costs of rectification are continuing to increase each year. Rectification or 're-work' costs are now having a significant impact on the cost of construction in Australia, the profitability of the building and construction industry, and the productive efficiency of the NSW economy.

There are three key costs to homeowners of rectifying defective building work:

- a) Increased costs associated with dispute resolution
- b) Increased Home Warranty Insurance costs
- c) Increased building costs

a) Increasing costs associated with dispute resolution

From a homeowners' perspective, defective building work is not only a highly emotional experience but a costly one that delays completion of the building project and/or involves considerable time and effort to resolve through dispute resolution and tribunal processes.

For example, obtaining independent building inspection reports required to support a building dispute claim lodged with regulators and tribunals is extremely costly to homeowners. The reports can range from \$5,000 to \$15,000 per report.

Dispute resolution also involves an 'opportunity cost' of time that homeowners and builders spend attending conciliation conferences and tribunal hearings, when they otherwise could have been at work. In some cases, direct costs of engaging legal representation are also required.

The number of building claims lodged and determined by tribunals has declined by almost 33% over the past decade (see Figure 14 above). However, the number of NCAT claims for 2017-18 (2,870) remains significantly higher than in Victoria and Queensland (see Appendix J).

While the cost associated with lodging claims in tribunals is not substantial, if we suggest a conservative estimate of the opportunity cost of time for home owners to attend conciliation conferences, prepare for and attend hearings is around \$2,000 per claim then the cost to homeowners to resolve defective building work disputes in NSW in 2017-18 is estimated to have been around \$5.7 million.

Although likely to be much higher, for the sake of simplicity, this paper makes an assumption that the cost of tribunal processes for builders are the same as homeowners. Therefore, the total cost to both homeowners and builders of seeking resolution of building disputes via NCAT is estimated as being around \$11.4m annually.

Utilising data from the NCAT (NSW Civil & Administrative Tribunal) Annual Report 2017-18, the cost to Government of resolving defective building work disputes in NCAT was close to \$2.6m each year (\$905 per dispute). 19

Accordingly, the total cost of building dispute resolution via NCAT in NSW is estimated to be around \$14m annually.



b) Increased Home Warranty Insurance costs

A major cost factor that is often overlooked by policy makers is the increasing cost of mandatory home building compensation (HBC) borne by homeowners.

Over the past 10 years the premiums collected by home warranty insurers has increased by over 200% from \$79.9m in 2006-07 to \$242m in 2015-16 (see Figure 23 below).

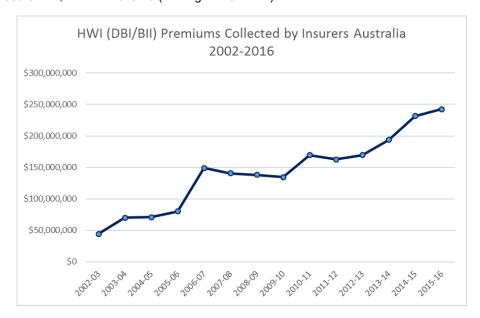


Figure 23 HWI premium collected in Australia 2002-16.

HBC premium increases of this degree should act as a red flag to policy makers as they are indicative of an adverse view held by underwriters regarding trends in defective building work based upon recent claims experience.

In order to build or renovate a home, homeowners have no alternative but to pay the HBC premiums applicable. In 2019, premiums to build a \$500,000 home ranged from \$3,158 in Victoria to \$4,560 in Queensland (see Table 10).

Jurisdiction	Premium for \$500,000 single dwelling (2019)	% Difference
NSW	\$5,695.25	
Victoria	\$3,158	-44.5%
Queensland	\$4,883.25	-14.3%

Table 10 HBC premium comparison

While premium prices are inelastic, given they are mandatory, HBC premiums are no longer viewed as being unsubstantial or insignificant by homeowners.

Comparatively, homeowners in NSW are paying premiums that are approximately 44.5% higher than homeowners in Victoria. In 2017-18, the VMIA in Victoria collected \$68.8m²⁰ in premium as compared to the \$130m collected by iCare in NSW. Accordingly, homeowners in NSW are collectively paying over \$60m more in HBC premiums.

Additionally, during the period 2002-03 to 2016-17 HBC claims cost in NSW were \$230m (50%) higher than in Victoria.



c) Increased building costs

Unlike the commercial building sector where the builder can ensure, to some degree, that rectification costs are passed onto sub-contractors by way of retentions, in the residential building sector builders factor additional contingency into their building contracts with homeowners.

Rectification costs represent a reduction in a builder's profit margin and are a major contributing factor to builder insolvencies.

Because of their considerable experience in dealing with defective building work carried out by sub-contractors and other building practitioners, builders have sought to protect their businesses from the threat of insolvency by incorporating contingency into their building contracts providing for post construction remediation (rectification) costs.

While not supported by empirical data, discussion with builders indicates that the size of remediation contingency may be around 5-10% of a projects contract price.

This 'institutionalised' behaviour by residential builders means that homeowners in Australia are likely to be paying 5-10% more for their homes and renovations than they should be.

Rectification of defects represents a less preferred outcome than avoidance of defects in the first instance. Thus, to the extent that further regulation can reduce the incidence of defects, there are significant financial benefits to be gained by builders, homeowners and the economy (due to better resource utilisation).

ABS statistics show that the total spend on residential construction in NSW in 2017-18 was \$25.9b. Accordingly, the cost or rectification of defective work borne by builders and homeowners in NSW is estimated to be around \$1.3b annually.

Any cost benefit analysis associated with increased regulation to the building and construction industry in NSW needs to be inclusive of these three significant costs to builders and homeowners.

6.2 AVOIDING RE-WORK IS A KEY BENEFIT OF MORE EFFECTIVE REGULATION THAT IS OFTEN OVERLOOKED

Data collected from across Australia, as well as research and analysis conducted over the past decade, strongly indicate that further regulation of the building and construction sector is warranted.

Research conducted by Mills, Love and Williams in 2009 utilising Victorian Home Guarantee Fund insurance claims data (1982-1997) found that one house in eight reported defects. ²¹ However, costs to the builder, homeowner and economy of the unproductive re-work that comes from defective building work is often overlooked.

So, what is the size of this problem? How much is re-work costing builders and homeowners and the NSW economy each year?

Re-work is costing NSW builders and homeowners ~\$1.3 billion per annum

There have been many research studies conducted in Australia and overseas that have attempted to answer these two questions (see Table 11 below). As research conducted by Love (2002) and Mills, Love and Williams (2009) ²² is based on Australian residential data sets their research findings would appear to be an acceptable basis for estimating the cost of re-work in Australia (see Appendix K) for further detail on the research conducted).



Research Author(s)	Country	Rework Cost (% of contract price)
Cusack (1992)	Australia	10.0%
Burroughs (1993)	Australia	5.0%
Lomas (1996)	Australia	>1.0%
CIDA (1995)	Australia	6.5%
Love et al. (1999)	Australia	3.2%
Love (2002)	Australia	6.4%
Mills, Love & Williams (2009)	Australia	4.0%
Cnudde (1991)	Belgium	10.0-20.0%
CIDB (1989)	Singapore	5.0-10.0%
Nylen (1996)	Sweden	10.0%
Hammarlund & Josephson (1991)	Sweden	6.0%
Hammarlund & Josephson (1999)	Sweden	2.3%-9.3%
Farrington (1987)	USA	14.0%
Willis & Willis (1996)	USA	3.3%
Hwang <i>et al.</i> (2009)	USA	5.0%
Abdul-Rahman (1993)	UK	2.5-5.0%
Barber <i>et al.</i> (2000)	UK	3.6-6.6%

Table 11 Estimate of the cost of re-work as a percentage of contract price.

The two studies conducted by Love and Mills and then Love and Williams found that the cost of re-work in residential construction in Australia was between 4.0 and 6.4% of the contract price for the building project. This paper will use a rounded average (5.0%) of the findings of the two Australian research papers for analysis purposes, albeit the actual cost of re-work may have increased considerably since 1997.

Utilising ABS data regarding the value of residential building and construction work carried out in Australia in 2017-18 and applying the 5.0% re-work cost estimate, the estimated cost of re-work to the NSW economy in 2017-18 was almost \$1.3 billion (see table 12).

Jurisdiction	Value of Residential Construction 2017/18 (\$'000)	Cost of Re- Work (5% of contract value - \$'000)		
ACT	\$1,547,245	\$77,362		
New South Wales	\$25,905,621	\$1,295,281		
Northern Territory	\$418,650	\$20,933		
Queensland	\$13,075,781	\$653,789		
South Australia	\$3,359,268	\$167,963		
Tasmania	\$769,805	\$38,490		
Victoria	\$22,900,180	\$1,145,009		
Western Australia	\$6,133,827	\$306,691		
Total	\$74,110,377	\$3,705,519		

Table 12 Estimate of the cost of re-work in Australia 2017-18.



6.3 COST-BENEFIT ANALYSIS SUPPORTS REGULATION OF THE NSW BULDING & CONTRUCTION INDUSTRY AND THE ESTALISHMENT OF AN INDEPENDENT BUILDING COMMISSION

The key benefits and costs of further regulation

The key benefits of introducing additional regulation and establishing an NBCC include:

- A reduction in defective building work (and avoidance of costly re-work);
- A reduction in the cost of resolving existing disputes (through complaint and tribunal processes);
- · Lower home building compensations scheme premiums;
- · Lower home building compensation claims costs;
- A sustainable home building compensation scheme;
- A larger, more competitive and skilled industry
- Increased consumer confidence, and
- A more profitable industry

The key costs against which these benefits need to be evaluated include:

- Regulatory implementation costs;
- Costs of establishing an NBCC;
- Additional registration & compliance costs;
- Ongoing regulatory costs

Outlined below are the outcomes of an indicative cost-benefit analysis in relation to implementing further regulation of the building and construction industry inclusive of establishing an independent building commission. The analysis also includes the key assumptions used to conduct the analysis.

Benefits of further regulation of building & construction industry

As outlined in Section 6.1, in addition to the avoidance of defective building work or re-work costs the key benefits of further regulation flow from a reduction in disputes, home building compensation premiums and claims costs.

The better regulatory outcomes being achieved in each of the key performance indicator areas by Victoria and Queensland provides a good basis for determining the level of benefits that NSW can expect to derive from further regulation in NSW. A summary of the better building outcomes achieved in Victoria and Queensland is set out in table 13 below.

	Key Performance Indicator	NSW	Victoria	Queensland	Average Total Difference (%)
1	Building Complaints 2017-18 (per 1000 homes)	132.8	23.2	99.8	
	Difference in Outcome (%)		82.5%	24.9%	53.7%
2	Tribunal Disputes 2017-18 (per 1000 homes)	45	26	8	
	Difference in Outcome (%)		42.2%	82.2%	62.2%
3	Tribunal Dispute Costs 2017-18	\$14,000,000	\$9,300,000	\$2,440,000	
	Difference in Outcome (%)		33.6%	82.6%	58.1%
4	Home Building Compensation Premiums Collected 2017-18	\$130,000,000	\$68,800,000	\$82,800,000	
	Difference in Outcome (%)		47.1%	36.3%	41.7%
5	Home Building Compensation Claims Costs 2002-18	\$506,783,517	\$276,384,000	\$304,070,110	
	Difference in Outcome (%)		45.5%	40.0%	42.7%

51.7%

Table 13 Summary of better building outcomes being achieved in Victoria and Queensland.



The key performance indicator summary indicates that the Victorian and Queensland regulatory approaches are achieving better building outcomes of around an average of 51.7%.

For the purposes of this cost benefit analysis, this paper will assume a more modest improvement in building outcomes of 20% resulting from an increase in regulation and the establishment of the NBCC as proposed by this blueprint. On this basis, the analysis of the benefits is set out within table 14 below.

New South Wales	Current Cost	Assumed 20% reduction	Benefit of further Regulation
Cost of NCAT Building Disputes in NSW 2017/18	\$11,400,000	\$9,120,000	\$2,280,000
Cost of HBC Premiums in NSW 2017/18	\$130,000,000	\$104,000,000	\$26,000,000
HBC Claims Costs in NSW 2017/18	\$54,355,000	\$43,484,000	\$10,871,000
Estimated Cost of Re-Work in NSW 2017-18	\$1,295,281,050	\$1,036,224,840	\$259,056,210
Total Benefit to NSW of further regulation			\$298,207,210

Table 14 Benefits of further regulation of the NSW building & construction industry.

The estimated economic benefit of further regulation of the building & construction industry in NSW is estimated to be almost \$300m.

Costs of further regulation and establishing an NBCC

Upfront cost

Description: Once-off upfront costs associated with the initial registration of further building practitioner groups.

Cost estimate: The once-off cost of registering further building practitioner groups for the first time is estimated at \$1.5 million. This cost estimate is based upon an estimate that 5144 building designers and engineers are expected to apply for registered and registration assessment costs of \$296²³ per practitioner if a full cost recovery fee were to be set.

These estimates are based on the following key assumptions:

- The number of registrations of building designers and engineers will be approximately the same as in Victoria (2688 Engineers and 2456 Building Designers); and
- The assessments required of these additional building practitioner groups will be no more onerous than the existing assessment of building contractor licence applications.

Additional upfront costs

A range of additional costs would also be incurred in the lead up to implementation of a new registration process. Quantitative estimation of these costs is not possible within the scope of this paper; however, they would include the following:

- Cost of policy development in relation to the setting of registration requirements, renewal periods, treatment of existing practitioners
- Cost of publicising the changes to both the affected trades, other registered trades (notably builders) and consumers, and
- Costs associated with development and implementation of necessary regulatory amendments to introduce the expanded registration arrangements.



Annual costs

Description: Costs associated with the annual registration renewal of additional building practitioners.

Cost estimate: The costs of renewing the registration of the addition building practitioner group is estimated at \$354K per annum. Given that 5144 registration are expected and the full cost recovery renewal fee of \$69 is set.

These estimates are based on the following key assumptions:

- The number of registrations of building designers and engineers will be approximately the same as in Victoria (2688 Engineers and 2456 Building Designers);
- The renewal assessments required of these additional building practitioner groups will be no more onerous than the existing renewal assessment of building contractor licensees; and
- Registration renewal would be on an annual basis.

Annual costs

Description: Costs associated with compliance and enforcement of new building practitioner group.

Cost estimate: The costs of compliance and enforcement activities relating to the addition building practitioner group is estimated at \$1.1m per annum. Given that 5144 registration are expected, and the current average spend on compliance and enforcement per building practitioner is \$218.

These estimates are based on the following key assumptions:

- The number of registrations of building designers and engineers will be approximately the same as in Victoria (2688 Engineers and 2456 Building Designers); and
- The compliance activities required in relation to the new additional building practitioner groups will be no more onerous than the activities relating to building contractor licensees.

Costs of establishing an NBCC

The costs associated with establishing an NBCC are set out within section 5.5 of this paper.

These estimates are based on the following key assumptions:

- The transfer of existing regulatory staff from existing separate regulatory agencies;
- The utilisation of existing licensing and registration systems and processes; and
- The utilisation of existing systems and processes for the registration of the additional building practitioner groups.

Cost-benefit analysis

Table 15 summarises the benefits and costs identified in the preceding sections of the blueprint paper. The projected benefits of further regulation of building and construction industry are estimated at \$298m per annum. The one-off costs associated with initial registration of the additional building practitioners will be approximately \$1.5m, with on-going costs of \$354K per annum (rounded up to \$0.5m).



	One-off	Annual
Benefits		
Reduction in defects (re-work costs)	-	\$259m
Reduction in NCAT dispute costs	-	\$2.28m
Reduction in HBC premiums	-	\$26m
Reduction in HBC claims costs	-	\$10.8m
Other benefits	Unquantified	Unquantified
Total benefits	-	\$298m
Costs		
New Registration	\$1.5m	\$0.5m
Compliance & Enforcement	-	\$1.1m
Establishing an NBCC	\$20m	\$126.6m
NCC Compliance Reporting Regime	Unquantified	Unquantified
Total costs	\$21.5m	\$127.2m

Table 15 Comparison of the benefits and costs of further regulation.

The overall projected annual benefits of establishing an NBCC and further regulating the building and construction industry in NSW has a benefit/cost ratio = 2.34:1).

While there is a substantial economic net benefit to the industry and economy of NSW, it is important to also consider the full range of other less easily quantifiable benefits such as:

- An increase in consumer/investor confidence
- a more competitive and skilled building and construction industry;
- a more profitable building and construction industry; and
- lower cost of construction and improved housing affordability.



7 A PLAN FOR IMPLEMENTATION

Given the level of understanding of the critical need to address current and emerging issues impacting upon the building and construction industry, together with the collective agreement amongst the vast majority of the industry who support the need for regulatory reform, Master Builders does not believe that a lengthy consultation period will be required.

If industry consultation were to commence in June, this should leave the Government sufficient time to seek further cabinet approvals and prepare amending legislation for introduction into the 2019 spring session of Parliament. A high-level implementation schedule is set out within table

Implementation	Implementation Schedule							
DATE	MILESTONE	POSITION						
1-Jun	Government announces commencement of industry Consultation	-15						
31-Jul	Industry consultation concludes	15						
1-Sep	Cabinet approval of industry reforms	-15						
1-Oct	Release of consultation draft Bill	10						
15-Oct	ERC of Cabinet approval of special budget allocation	-15						
1-Nov	Introduction of Bill to Parliament	15						
14-Nov	Amendment Bill Passed	-15						
1-Jan	Legislative Amendments commence	-15						
1-Jul	NBCC Commences Operation	-15						
1-Oct	Building Designer & Engineer Registration Commences	15						
1-Jan	Compliance Reporting Regime Commences	-10						

Table 16 Proposed implementation schedule.

Proceeding in line with the implementation schedule proposed would see the Government's reform legislation commence from 1 January next year, the NBCC commence operation from 1 July 2020, building designer and engineer registration commence from late 2020 and new compliance reporting obligations for building designer, engineers and builders commence from 1 January 2021.

An implementation timeline is enclosed at Appendix L.



REFERENCES

Architects Registration Board Queensland, Annual report 2017-18

Architects Registration Board Victoria, Annual report 2017-18

Australian Bureau of Statistics, published data on info-cluster 8752.0, Building Activity, Australia, 2018

Australian Bureau of Statistics, published data on the Private Sector Construction Industry 8772.0, Australia, 2018

Australian Guide to Regulation, Department of Prime Minister & Cabinet, 2014

Australian Public Service Commission, Enterprise Agreement 2015-18

Board of Professional Engineers Queensland, Annual Report 2017-18

Bon-Gang Hwang; Stephen R. Thomas, Carl T. Haas; and Carlos H. Caldas, Measuring the Impact of Rework on Construction Cost Performance, 2009

Consumer Affairs Victoria, Annual report 2017-18

Hallett, D (2015), Prevention is Better than Cure: A recommendation for the regulation of building tradespeople in Australia

iCare NSW. Annual Report 2017-18

Love. P and Edwards. D, School of Management Information Systems, Edith Cowan University, Forensic project management: the underlying causes of rework in construction projects, 2004

Mills, Love and Williams, Defect Costs in Residential Construction, 2009

NSW Architects Registration Board, Annual report 2017-18.

NSW Building Professionals Board, Annual report 2017-18

NSW Civil & Administrative Tribunal, Annual Report 2017-18

NSW Department of Finance, Service & Innovation, Annual report 2017-18

NSW Parliament, NSW Economic Update Summer 2018

NSW Fair Trading, Year in Review 2016-17

NSW Fair Trading, Strategy 2019-22

NSW Government, Joint Select Committee on Quality of Buildings, 2002

NSW Long Service Payment Corporation, Annual report 20-17-18

Queensland Building and Construction Commission, QBCC Year on Year Performance Report, 2017-18

Queensland Civil & Administrative Tribunal, Annual Report 2017-18

QLeave, Annual report 2017-18

Stennings & Associates, NSW Department of Commerce – Office of Fair Trading, Evaluation of the CPD Programs for Property and Building License & Certificate Holders in New South Wales, Final Report, 2007

Victorian Building Authority, Annual Report 2017-18.

Victorian Managed Insurance Authority, Annual Report 2017-18.

Victorian Auditor General, Victoria's domestic building insurance scheme Performance report 2017-18



Victorian Civil & Administrative Tribunal, Annual report 2017-18

WorkSafe Victoria, Annual Report 2017-18

Zaidi M.A and Dr Hilary Davies, Deakin University, School of Architecture and Building, *A Question of Continuing Control - Balancing Building Quality of Housing and Building Codes*, 2009.

Zaidi M.A and Dr Hilary Davies, Deakin University, School of Architecture and Building, A *prospective study on building quality: enforcement of control in the Australian housing industry*, 2010

APPENDICES

APPENDIX A: STAFF COSTINGS FOR NBCC



STAFF SALARIES AND ON COSTS

		Numb					
	Classification/Grad	er of		Superannuat			Total Annual
Position Name	ing	roles	Salary 2019	ion	On-costs*	Cost	Cost
		GC	VERNANCE				
	Statutory						
Board Chair	Appointment	1	\$150,000	\$14,250	\$30,000	\$194,250	\$194,250
	Statutory						
Member	Appointment	6	\$75,000	\$7,125	\$15,000	\$97,125	\$582,750
		ADVIS	ORY COUNCILS				
	Statutory						
Council Chair	Appointment	3	\$50,000	\$4,750	\$10,000	\$64,750	\$194,250
	Statutory						
Members	Appointment	12	\$25,000	\$2,375	\$5,000	\$32,375	\$388,500
EXECUTIVE							
Commissioner	SES 3 (mid-range)	1	\$313,609	\$29,793	\$62,722	\$406,125	\$406,125
Assistant Commissioners	SES 2 (Top range)	3	\$260,310	\$24,729	\$52,062	\$337,100	\$1,011,300
Chief Financial Officer	SES 2 (Top range)	1	\$260,310	\$24,729	\$52,062	\$337,100	\$337,100



Executive Director Corporate	SES 2 (Top range)	1	\$260,310	\$24,729	\$52,062	\$337,100	\$337,100
General Counsel	SES 2 (Top range)	1	\$260,310	\$24,729	\$52,062	\$337,100	\$337,100
		7					
	IN	DUSTRY S	TANDARDS & POL	ICY			
Director Industry Policy	SES 1 (Top Range)	1	\$206,950	\$19,660	\$41,390	\$268,000	\$268,000
Senior Policy Officer	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Policy Officers	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Manager, Industry Data Analysis	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Data Analyst	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Manager, Industry Training & CPD	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Industry Training	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
Industry Qualifications	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
Executive Assistant	Grade 5/6	1	\$92,026	\$8,742	\$18,405	\$119,174	\$119,174
		12					
	C	OMPLIAN	ICE & ENFORCMEN	NT			
Registration & Licensing Branch							
Director Registration & Licensing	SES 1 (Top Range)	1	\$206,950	\$19,660	\$41,390	\$268,000	\$268,000
Manager Registration & Licensing Assessments	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Registration & Licensing Co-Ordinator	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Registration & Licensing team leader	Grade 7/8	4	\$104,918	\$9,967	\$20,984	\$135,869	\$543,475
Senior Assessment Officer	Grade 5/6	4	\$92,026	\$8,742	\$18,405	\$119,174	\$476,695
Assessment Officers	Grade 3/4	8	\$77,363	\$7,349	\$15,473	\$100,185	\$801,481
Co-Ordinator Existing Authorities	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Team Leader	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Senior Renewals Officer	Grade 5/6	6	\$92,026	\$8,742	\$18,405	\$119,174	\$715,042
Renewals Officer	Grade 3/4	4	\$77,363	\$7,349	\$15,473	\$100,185	\$400,740
Document Administration Co- Ordinator	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869



Team leaders	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
Licensing Administration Officers	Garde 3/4	4	\$77,363	\$7,349	\$15,473	\$100,185	\$400,740
		40					
Audit & Investigation Branch							
Director Compliance & Enforcement	SES 1 (Top Range)	1	\$206,950	\$19,660	\$41,390	\$268,000	\$268,000
Manager, Audit & Investigations	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Investigator	Grade 9/10	4	\$119,061	\$11,311	\$23,812	\$154,184	\$616,736
Investigator	Grade 7/8	20	\$104,918	\$9,967	\$20,984	\$135,869	\$2,717,376
Compliance & Audit Inspectors	Grade 7/8	10	\$104,918	\$9,967	\$20,984	\$135,869	\$1,358,688
Manager, Compliance Administration (Discipline)	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Compliance administration officers	Grade 7/8	4	\$104,918	\$9,967	\$20,984	\$135,869	\$543,475
		41					
Industry Complaints & Intelligence Branch							
Manager, Industry Complaints &							
Intelligence	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Complaints Co-ordinator 1	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Complaint assessment officers	Grade 7/8	4	\$104,918	\$9,967	\$20,984	\$135,869	\$543,475
Intelligence Co-ordinator	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Intelligence Officers	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Financial Analysts	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Co-Ordinator Compliant Work Notification	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Senior CWN Assessor	Grade 7/8	4	\$104,918	\$9,967	\$20,984	\$135,869	\$543,475
CWN Assessor	Grade 5/6	4	\$92,026	\$8,742	\$18,405	\$119,174	\$476,695
Administration Officer	Grade 3/4	1	\$77,363	\$7,349	\$15,473	\$100,185	\$100,185
		21	•			•	
	ı		PERATIONS	1	1		



Customer Service & Digital							
Communications							
Manager, Customer Service	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Team Leaders	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Customer Service Agents	Grade 5/6	4	\$92,026	\$8,742	\$18,405	\$119,174	\$476,695
Digital Communications Officers	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		9					
Building Dispute Resolution Service							
Manager, Building Dispute Resolution							
Service	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Building Dispute Co-Ordinators	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Senior Building Inspector	Grade 7/8	8	\$104,918	\$9,967	\$20,984	\$135,869	\$1,086,950
Building Inspector	Grade 5/6	8	\$92,026	\$8,742	\$18,405	\$119,174	\$953,389
Administration Officer	Grade 3/4	2	\$77,363	\$7,349	\$15,473	\$100,185	\$200,370
		21					
Plumbing Inspection & Assurance							
Service							
Manager, PIAS	Grade 11/12	3	\$144,521	\$13,729	\$28,904	\$187,155	\$561,464
PIAS Co-Ordinator	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Senior Plumbing Inspector	Grade 7/8	12	\$104,918	\$9,967	\$20,984	\$135,869	\$1,630,426
Plumbing Inspector	Grade 5/6	12	\$92,026	\$8,742	\$18,405	\$119,174	\$1,430,084
Administration Officer	Grade 3/4	2	\$77,363	\$7,349	\$15,473	\$100,185	\$200,370
PIAS Customer Service Officer	Grade 3/4	6	\$77,363	\$7,349	\$15,473	\$100,185	\$601,111
		37					
Electrical Compliance & Safety Unit							
Manager, ECSU	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior, ESCU Officer	Grade 7/8	6	\$104,918	\$9,967	\$20,984	\$135,869	\$815,213
ESCU Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
Administration Officer	Grade 3/4	3	\$77,363	\$7,349	\$15,473	\$100,185	\$300,555



Assistants	Grade 1/2	2	\$63,199	\$6,004	\$12,640	\$81,843	\$163,685
		14					
Home Building Compensation Branch							
Director, HBC	SES 1 (Top Range)	1	\$206,950	\$19,660	\$41,390	\$268,000	\$268,000
Manager, Eligibility Assessment &							
Monitoring	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Eligibility Assessment Officer	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Eligibility Assessment Officer	Grade 7/8	8	\$104,918	\$9,967	\$20,984	\$135,869	\$1,086,950
Financial Analysts	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Manager, HBC Claims	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Claims Officer	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Claims Officer	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
HBC Scheme Actuary	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Manager, Debt Recovery	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Debt Recovery officer	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
		23					
Security of Payments							
Senior SOP Administration Officer	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
SOP Administration Officer	Garde 5/6	1	\$92,026	\$8,742	\$18,405	\$119,174	\$119,174
		2					
		CHIEF FI	NANCIAL OFFICER				
Finance & Administrative Support							
Branch							
Manager, Finance & Support Branch	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Team Leader Account Payable	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
Account Payable Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
Team Leader Accounts Receivable	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
Accounts Receivable Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
Administration Support Co-Ordinator	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184



Administrative Support Officers	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		10					
		CORPO	RATE SUPPORT				
ICT Infrastructure & Support							
Chief Information Officer	SES 1 (Top Range)	1	\$206,950	\$19,660	\$41,390	\$268,000	\$268,000
Senior ICT Support Officer	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
ICT Support Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		5					
People & Culture Branch							
Manager, People & Culture	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Team Leaders	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
People & Culture Officers	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		5					
Board & Council Secretariat							
Board & Council Co-Ordinator	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Secretariat Officers	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		3					
Risk Management & Quality Assurance							
Manager, Risk Man & QA	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Risk Man & QA Officers	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
		3					
Communications & Stakeholder Relations							
Manager, Comms and SR	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Media Officer	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
Communication Officer	Grade 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
		3					
GIPA & Privacy Unit							



GIPA & Privacy Co-Ordinator	Grade 9/10	1	\$119,061	\$11,311	\$23,812	\$154,184	\$154,184
GIPA & Privacy Officer	Garde 7/8	1	\$104,918	\$9,967	\$20,984	\$135,869	\$135,869
		2					
		GENE	RAL COUNSEL				
Legal Services Branch							
Manager, Legal Services	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Legal Officer	Grade 9/10	2	\$119,061	\$11,311	\$23,812	\$154,184	\$308,368
Legal Officer	Grade 7/8	4	\$104,918	\$9,967	\$20,984	\$135,869	\$543,475
Parra Legal Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
Administration Officer	Grade 3/4	2	\$77,363	\$7,349	\$15,473	\$100,185	\$200,370
		11					
Internal Review Unit							
Manager Internal Review	Grade 11/12	1	\$144,521	\$13,729	\$28,904	\$187,155	\$187,155
Senior Internal Reviewer	Grade 7/8	2	\$104,918	\$9,967	\$20,984	\$135,869	\$271,738
Internal Review Officer	Grade 5/6	2	\$92,026	\$8,742	\$18,405	\$119,174	\$238,347
		5					
					\$8,002,51		
Total FTE		274		\$3,801,196	7		\$40,012,587



APPENDIX B: OPERATING COSTINGS FOR NBCC



OPERATING COSTS

(b) Including HBC

Expenditure Item	Annual Expenditure
Accommodation and utilities	\$3,800,000
ABCB NSW Contribution	\$1,053,000
Board & Council Member Fees	\$1,359,750
Communication & Marketing	\$2,300,000
Legal fees	\$2,300,000
Technical contractors (panels)	\$1,300,000
IT services and records management expenses	\$1,680,000
Consultants	\$750,000
General office expenses	\$1,150,000
Printing and stationery	\$880,000
Motor vehicles and travel expenses	\$495,000
Insurance premiums	\$270,000
Events, seminars and meetings	\$160,000
Minor assets	\$290,000
External audit fees	\$120,000
Internal audit fees	\$150,000
Total Operational Expenditure	\$18,057,750

Expenditure Item	Annual Expenditure
Accommodation and utilities	\$3,800,000
ABCB NSW Contribution	\$1,053,000
Board & Council Member Fees	\$1,359,750
Communication & Marketing	\$2,300,000
Legal fees	\$2,300,000
Technical contractors (panels)	\$1,300,000
IT services and records management	\$1,680,000
Consultants	\$750,000
General office expenses	\$1,150,000
Printing and stationery	\$880,000
Motor vehicles and travel expenses	\$495,000
Insurance premiums	\$270,000
Events, seminars and meetings	\$160,000
Minor assets	\$290,000
External audit fees	\$120,000
Internal audit fees	\$150,000
HBC Scheme External Actuary	\$250,000
Claims	\$50,720,000
Claims Management Costs	\$57,630,000
Total Operational Expenditure	\$126,657,750



APPENDIX C: NBCC REVENUE AND EXPENDITURE



REVENUE & EXPENDITURE

(a) Not including HBC

Revenue*	\$97,253,025
Expenditure (Staff Salaries)	\$40,012,587
Expenditure (Operational)	\$18,057,750
Operating Surplus / (Deficit)	\$39,182,689

(b) Including HBC

Revenue*	\$218,039,025
Expenditure (Staff Salaries)	\$40,012,587
Expenditure (Operational)	\$126,657,750
Operating Surplus / (Deficit)	\$51,368,689

* Requires Treasury Agreement to allow NBCC to retain all licensing & registration revenue

APPENDIX D: NBCC FORWARD PROJECTIONS

Financial Impact of Proposal

	2020-21	FO	RWARD E	RWARD ESTIMATES		
	(\$'000)	2021-22	2022-23	2023-24	2024-25	
		(\$'000)	(\$'000)	(\$'000)	(\$'000)	
RECURRENT						
Expenses:						
Employee related	40,013	41,213	42,449	43,723	45,035	
Non employee related (incl. depreciation)	126,658	130,457	134,371	138,402	142,554	
Total Expenses	166,670	171,670	176,821	182,125	187,589	
less agency offset savings	0	0	0	0	0	
Net Expenses	166,670	171,670	176,821	182,125	187,589	
<u>less</u> Agency revenue	4,740	230,339	237,250	244,367	251,698	
Agency Net Cost Of Services	161,930	(58,669)	(60,429)	(62,242)	(64,109)	
Net on-costs to other budget sector agencies (as per schedule 3)	0	0	0	0	0	
Net recurrent on-costs to other budget sector agencies	214,426	0	0		0	
NSW Fair Trading, iCare and ARB budget transfers Tatal Nat Contact Services (NCS)		(50,000)	(00, 400)	(00.040)	(04.400)	
Total Net Cost of Services (NCS)	(52,496)	(58,669)	(60,429)	(62,242)	(64,109)	
CONSOLIDATED FUND REVENUES	0	0	0	0	0	
Taxes	0	0	0	0	0	
Commonwealth Funding	0	0	0	0	0	
Other (please specify)	0	0	0	0	0	
Total Consolidated Fund Revenues	0	0	0	0	0	
CAPITAL						
Capital Expenditure	20,000	10,000	5,000	0	0	
<u>less</u> Agency offset savings (incl. asset sales)	0	10,000	5,000	0	0	
Net Capital Expenditure	20,000	0	0	0	0	
Net on-costs to other budget sector agencies (as per	0	0	0	0	0	
schedule 3)		-	-	-	•	
Total Net Capital Expenditure	20,000	0	0	0	0	
TOTAL FINANCIAL IMPACT (NOC. I						
TOTAL FINANCIAL IMPACT (NCS less Depreciation + Net Capital expenditure less Consolidated Fund Revenues)	(32,496)	(62,169)	(38,679)	(31,367)	(64,109)	
Funded by:						
Existing Cash Balances/Loans/Advances	0	32,496	62,169	38,679	31,367	
Consolidated Fund	20,000	0	0	0	0	
Other (Licensing & Fee for Service)	219,166	230,339	237,250	244,367	251,698	
Total	239,166	262,835	299,418	283,046	283,065	
Cahadula O. Budwat Caatan Otaffin						
Schedule 2: Budget Sector Staffing	2020-21	FO	DWADD E	STIMATES		
	(\$'000)	2021-22 (\$'000)	2022-23 (\$'000)	2023-24 (\$'000)	2024-25 (\$'000)	
Staffing (FTE) – lead agency	40,013	41,213	42,449	43,723	45,035	
Other Budget sector agencies	40,013	41,213	74,743	43,723	70,000	
TOTAL	40,013	41,213	42,449		45,035	



APPENDIX E: ESTIMATE OF REVENUE FROM NEW REGISTRATION OF ADDITIONAL PRACTITIONERS



ENGINEER & BUILDING DESIGNER REGISTRATION

Initial Registration*	No.**	Registration Fee #	Annual Revenue ##
Engineer Registration			
Individuals	2150	\$1,578	\$1,131,110.40
Corporations	538	\$2,940	\$526,848.00
Building Design & Draftsperson			
Individuals	1965	\$1,578	\$1,033,484.80
Corporations	491	\$2,940	\$481,376.00
First Registration Year			\$3,172,819.20
Annual Registration Renewal Fees			
Engineer Registration			
Individuals	2150	\$1,153	\$826,470.40
Corporations	538	\$1,710	\$306,432.00
Building Design & Draftsperson			
Individuals	1965	\$1,153	\$755,138.13
Corporations	491	\$1,710	\$279,984.00
Annual Registration Renewal Revenue			\$2,168,024.53
Assuming 5% annual new registrations	257		\$158,641
Total Revenue			\$2,326,665

*	Assuming same number of Engineer Re	gistrations at Victoria	2688
**	Assuming 80% individual and 20% Corp	orations	
***	Assuming same number of Designer Re	gistrations at Victoria	2456
****	Assuming 80% individual and 20% Corp	orations	
#	Same Fees as Building Contractors		
##	Assuming 3-year Registration	Total Registrations	5144



APPENDIX F: ESTIMATE OF NBCC LICENSING REVENUE



BUILDING PRACTITIONER REGISTRATION & LICENSING REVENUE

Annual Licensing & Registration Applications	
Current Building Contractor Applications	\$15,942,023
Engineer, Designer/Draftsperson Registration	\$158,641
Total Annual Application Revenue	\$16,100,664
Annual Licensing & Registration Renewals	
Current Building Contractor Renewals	\$60,956,439
Current BPB Certifier Registration*	\$1,750,000
Architects Registration Fees**	\$1,306,837
Engineer, Designer/Draftsperson Renewals	\$2,326,665
Total Annual Registration Renewal Annual	
Revenue	\$66,339,941
Annual Total Licensing Revenue	\$82,440,605

- * BPB Annual Report 2017-18
- ** ARB Annual Report 2017-18



APPENDIX G: ESTIMATE OF COMPLIANCE NOTIFICATION REVENUE



NOTIFIABLE WORK *

Average Number of new residential buildings	Notification Fee**	Revenue
40265	\$28	\$2,254,840

New regime requiring builders & building professional to sign-off on building design

- * compliance
- ** Assuming a similar fee to Queensland



APPENDIX H: HIGH-LEVEL NBCC BUDGET



NBCC BUDGET

Revenue*	\$218,039,025
Expenditure (Staff Salaries)	\$40,012,587
Expenditure (Operational)	\$126,657,750
Operating Surplus / (Deficit)	\$51,368,689

^{*}Requires Treasury Agreement to allow NBCC to retain all licensing & registration revenue



APPENDIX I: ESTIMATE OF REVENUE FROM BUILDING CONSENT LEVY FUNDING MODEL



Building Consent Levy

(a) Existing levy

Revenue derived 2017-18 (0.6%) *	Value of Building Projects approved
\$194,043,000	\$32,340,500,000

(b) Proposed new Levy

Revenue derived 2017-18 (0.7%)	Value of Building Projects approved**
\$226,383,500	\$32,340,500,000

Additional	
Revenue	\$32,340,500

^{*}Page 29 of Long Service Payment Corporation's Annual Report 2017-18

^{**}Assuming same future value of building projects

APPENDIX J: TRIBUNAL DISPUTE DATA

						South	Western			
Jurisdiction	Year	Victoria	NSW	Tasmania	Queensland	Australia	Australia	NT	ACT	Totals
	1999-00	2468	5,032							7500
	2000-01	2388	5,347				905			8640
	2001-02	2333	4,641				579			7553
	2002-03	2687	5,685				577			8949
	2003-04	2652	4,048				649			7349
	2004-05	2621	4,446				785			7852
	2005-06	2611	4,004				888			7503
	2006-07	2391	3,709				818			6918
Number of building	2007-08	2283	3,610		966		799			7658
Tribunal	2008-09	1278	3,571		978		799			6626
claims/disputes	2009-10	964	3,451		484		828			5727
	2010-11	1016	3,475		422		852			5765
	2011-12	1229	3,894		409		563			6095
	2012-13	1497	3,703		329		339			5868
	2013-14	1743	3,543		307		210			5803
	2014-15	1801	3,105		265		305	11		5487
	2015-16	1746	2,976		307		302	12		5036
	2016-17	1856	2,860		315					
	2017-18	1739	2,870		333					4942
	1999-00	62	100							50
	2000-01	62	129				62			67
	2001-02	62	131				41			59
	2002-03	62	130				33			59
	2003-04	62	92				37			47
	2004-05	62	100				42			49
	2005-06	62	110				42			49
	2006-07	62	123				34			47
Tribunal disputes PER	2007-08	62	137		25		35			54
1000 completed	2008-09	31	128		25		38			45
residential constructions	2009-10	21	136		14		39			39
	2010-11	20	125		14		39			39
	2011-12	25	146		16		30			44
	2012-13	31	115		12		19			41
	2013-14	35	94		11		9			37
	2014-15	33	67		7		11	5		29
	2015-16	30	57		8		0	0		25
	2016-17	28	46		7					
	2017-18	26	45		8					25

APPENDIX K: PREVIOUS RE-WORK COST RESEARCH

Research	Country	Rework Cost	Comments
Author(s)	,	(% of contract price)	
Cusack (1992)	Australia	10%	Identified errors in design documentation to be the primary cause of rework
Burroughs (1993)	Australia	5%	Reported the causes of rework in major project were due to poor documentation produced by design consultants. Burroughs (1993) also revealed that a concreting subcontract experienced an increase of 31% due to rework
Lomas (1996)	Australia	>1%	Rework less than 1% when a QA system is implemented. Lomas reported that rework costs were approximately 5% prior to the introduction of QA
CIDA (1995)	Australia	6.5%	CIDA (1995) found that projects with a formal quality management system in place recorded lower levels of rework. The average cost of rework as a percentage of contract value for projects with a quality system was found to be 0.72%. Whereas those projects without a quality system in place have been found to have an average cost of rework 6.5%. Project procured using lump sum contracts were found to have rework costs as high as 15% of contract value
Love et.al (1999)	Australia	3.15%	Residential project procured using a traditional lump sum contract. Changes initiated by the client and end-user, as well as errors, and omissions in contract documentation were found to be the primary causes of rework
Love (2002)	Australia	6.4%	Sampled 161 Australian residential projects and found the mean direct and indirect rework costs were found to be 6.4% and 5.6% of the original contract value, respectively. Rework costs were found not to significantly vary with project type and procurement method used
Mills, Love & Williams (2009)	Australia	4%	Utilised Victorian HGF Home Warranty Insurance data 1982 to 1997.
Cnudde (1991)	Belgium	10%-20%	Reported that 46% of total deviation costs were created during design, compared to 22% for construction deviations, which were due to poor execution of work
CIDB (1989)	Singapore	5%-10%	CIBD stated that a proper quality management system would cost in the range of 0.1 to 0.5% of total project cost and return a saving of 3%
Nylen (1996)	Sweden	10%	This research examined quality failure costs in four major railway-engineering projects. In the four cases studies, 232 failures during the production phase of the project were identified, which account for 10%



			of each project's production costs. It was found that 10% of failures contributed to 90% of failure costs. 51% of failure originated from design due to communication problems between client and consultants.
Hammarlund & Josephson (1991)	Sweden	6%	79% of failure costs were attributed 20% of the failures that were recorded.
			Approximately 34% of failures were attributed to ineffective site management, 20% to design, and 13% to poor communication. It was found that 10% of production time was spent remedying failures
Hammarlund & Josephson (1999)	Sweden	2.3%-9.3%	This study examined the defect costs of seven building projects. The number of defects
			that occurred ranged from 283 to 480. 32% of defect costs were found to originate from design (design team), 45% originated from on-site (site management/ subcontractors) and 20% from materials, plant and equipment. Lack of motivation due to 'carelessness or forgetfulness' was attributed as a cause of 50% of defect costs
Farrington (1987)	USA	14.%	Design changes, errors and omissions averaged 78% of total deviations and 79% of total deviation costs. Construction deviations averaged 16% of total deviations. These findings also reported in Burati <i>et al.</i> (1992)
Willis & Willis (1996)	USA	3.3%	Willis and Willis reported that the total cost of quality, which is the costs of prevention and appraisal plus cost of failure and correction was 12% of project cost: 8.7% prevention and appraisal costs and 3.3% deviation correction
Hwang et.al (2009)	USA	5%	Analysis of a sample of US commercial and residential construction projects
Abdul-Rahman (1993)	UK	2.5% - 5%	Estimated cost of non- conformance to be 6% of project cost Non-conformance5%* In a highway project 72 non- conformances were identified. The reported figure of 5% did not include material wastage and head office overheads. Non-

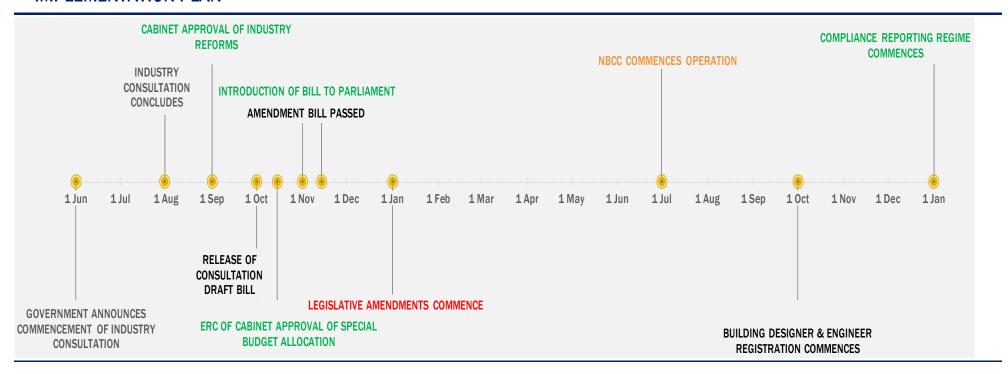


			conformances were attributable to the subcontractor, construction and design-related issues
Barber et.al (2000)	UK	3.6% - 6.6%	Revealed that quality failure costs were 16% and 23% of contract value. These estimates include the costs of delay. When these are removed then it was estimated that quality failure costs were 3.6% and 6.6%. Design-related failures accounted for 50% failures

^{*}Extract from Table I Forensic Project Management: The underlying causes of rework in construction projects (Love and Davies 2004)

APPENDIX L: IMPLEMENTATION TIMELINE

IMPLEMENTATION PLAN





APPENDIX M: ABS RESIDENTIAL HOUSING COMPLETION AND COST DATA

						South	Western			
Jurisdiction	Year	Victoria	NSW	Tasmania	Queensland	Australia	Australia	NT	ACT	Totals
	1999-00	39,894	50,127	1,675	31,970	6,955	16,720	1,120	1,371	149,832
	2000-01	38,586	41,490	1,359	24,345	6,358	14,501	580	1,236	128,455
	2001-02	37,713	35,370	1,454	30,645	6,554	14,130	679	1,163	127,708
	2002-03	43,428	43,856	1,836	34,206	8,849	17,516	757	2,384	152,832
	2003-04	42,865	43,937	2,256	37,896	9,407	17,576	718	2,428	157,083
	2004-05	42,357	44,389	2,618	38,897	9,932	18,679	878	1,902	159,652
	2005-06	42,193	36,495	2,655	38,172	10,360	20,924	979	2,394	154,172
Total number of	2006-07	38,648	30,250	2,433	38,006	9,569	23,915	1,289	2,287	146,397
residential properties	2007-08	36,892	26,385	2,788	39,333	10,751	22,592	739	2,172	141,652
constructed (ABS Data	2008-09	41,301	27,807	2,797	38,436	11,043	21,089	1,213	2,395	146,081
8752)	2009-10	45,822	25,343	2,733	33,604	11,797	21,483	1,102	3,297	145,181
3132)	2010-11	49,684	27,880	3,129	29,706	10,641	22,080	929	3,689	147,738
	2011-12	50,133	26,757	2,468	26,280	9,474	18,881	939	4,033	138,965
	2012-13	49,055	32,251	2,066	28,504	7,903	17,773	1,229	4,935	143,716
	2013-14	49,423	37,727	1,843	28,811	8,368	23,836	2,038	4,386	156,432
	2014-15	55,190	46,054	2,403	38,308	10,890	27,738	2,251	4,680	187,514
	2015-16	58,768	52,341	2,657	38,127	9,826	31,413	1,690	3,224	198,046
	2016-17	65,479	62,128	2,154	47,911	9,634	23,100	1,040	4,079	215,525
	2017-18	65,751	64,357	2,254	43,880	10,513	18,076	622	4,548	210,001
	1999-00	\$11,323,639	\$15,689,851	\$437,775	\$8,080,438	\$2,008,814	\$6,114,693	\$536,868	\$713,118	\$44,905,196
	2000-01	\$9,250,246	\$10,620,084	\$314,879	\$5,886,877	\$1,469,559	\$4,549,248	\$313,940	\$462,885	\$32,867,718
	2001-02	\$11,021,610	\$12,787,492	\$425,581	\$8,363,353	\$1,813,420	\$5,106,304	\$340,003	\$594,752	\$40,452,515
	2002-03	\$12,256,631	\$15,431,398	\$488,612	\$10,174,070	\$2,149,355	\$5,717,011	\$388,060	\$825,810	\$47,430,947
	2003-04	\$12,740,994	\$15,969,550	\$689,301	\$11,738,082	\$2,465,348	\$5,835,535	\$386,141	\$821,234	\$50,646,185
	2004-05	\$12,555,125	\$14,842,434	\$730,353	\$12,268,786	\$2,604,849	\$6,119,427	\$495,305	\$756,906	\$50,373,185
	2005-06	\$11,855,820	\$12,794,193	\$732,428	\$12,028,225	\$2,600,659	\$6,784,624	\$546,347	\$764,445	\$48,106,741
	2006-07	\$11,768,745	\$11,973,902	\$756,081	\$12,703,955	\$2,678,221	\$7,429,422	\$539,580	\$837,236	\$48,687,142
Total Value of	2007-08	\$12,128,218	\$11,577,960	\$790,636	\$12,823,496	\$2,814,108	\$7,756,885	\$544,645	\$767,781	\$49,203,729
Residential Construction	2008-09	\$13,504,439	\$11,075,359	\$794,586	\$11,580,139	\$2,939,587	\$7,730,201	\$496,732	\$823,982	\$48,945,025
(ABS Data) in '000\$	2009-10	\$14,922,876	\$11,417,448	\$815,215	\$11,234,937	\$2,915,128	\$7,648,588	\$625,301	\$1,139,048	\$50,718,541
	2010-11	\$16,291,381	\$12,381,226	\$831,236	\$10,043,350	\$3,002,620	\$7,841,354	\$806,586	\$1,404,786	\$52,602,539
	2011-12	\$16,273,779	\$11,484,148	\$730,093	\$9,020,819	\$2,673,676	\$6,740,009	\$755,577	\$1,511,323	\$49,189,424
	2012-13	\$16,599,534	\$13,330,874	\$618,515	\$8,851,366	\$2,245,467	\$6,941,428	\$639,922	\$1,432,111	\$50,659,217
	2013-14	\$16,311,190	\$14,475,298	\$576,314	\$9,469,280	\$2,580,485	\$8,213,901	\$820,258	\$1,303,198	\$53,749,924
	2014-15	\$17,764,548	\$16,750,269	\$737,652	\$10,817,739	\$2,928,862	\$8,839,227	\$725,499	\$1,374,836	\$59,938,632
	2015-16	\$20,217,822	\$19,579,329	\$737,259	\$12,583,725	\$2,856,506	\$8,611,596	\$636,743	\$1,279,215	\$66,502,195
	2016-17	\$22,365,299	\$24,797,179	\$671,716	\$14,231,322	\$3,019,191	\$6,729,800	\$461,278	\$1,605,053	\$73,880,838
	2017-18	\$22,900,180	\$25,905,621	\$769,805	\$13,075,781	\$3,359,268	\$6,133,827	\$418,650	\$1,547,245	\$74,110,377
		\$282,052,076	\$282,883,615		\$204,975,740					

APPENDIX N:DATA SOURCES

The table below lists the sources of data used for analysis

	Regulator Complaints and Disputes data	Tribunal Disputes/Claims data	Home (Builders) Warranty claims data
ACT	Building Quality in the ACT Report (2010) Environment & Sustainability Directorate Annual Reports	Not Available	Not Available
NSW	NSW Fair Trading Year in Reviews (2004-2017)	 NCAT Annual Reports (2012-2018) CTTT Annual Reports (2001-2012) 	HBCF Data (2002- 2018)
Northern Territory	NT Consumer Affairs Annual Reports (2007-16)	Not Available	Not Available
Queensland	 QBCC Annual Reports (2013-18) QBSA Annual Reports (2001-2012) QBCC data sheets 	 QCAT Annual Reports (2007-2018) Building Tribunal 	 QBCC Annual Reports (2013-18) QBSA Annual Reports (2001-2012) QBCC data sheets
South Australia	SA Consumer Affairs Annual Reports (2001-2016)	Not Available	Not Available
Tasmania	Building Co (Department of Justice) Annual Reports (2003-16)	Not Available	Not Available
Victoria	 CAV Annual Reports (2001-2018) Building Commission Reports (2001-2013) VBA Annual Reports (2013-2018) VBA Data (5 Year) 	VCAT Annual Reports (2007-2018)	VMIA Annual Reports (2012-18) VMIA data sets Essential Services Commissioner Report 2015-18
Western Australia	Building Commission Annual Report (2012-16) BRB (2004-2012)	 SAT (WA) (2011- 2016) Building Disputes Tribunal (2001- 2011) 	WA Building Commission data sheets

APPENDIX O: COMPLAINT DATA

luviadiation	Voor	Vietorio	NSW	Taamania	Ousensland	South	Western	NT	ACT	Totala
Jurisdiction	Year	Victoria		Tasmania	Queensland	Australia	Australia	NT	ACT	Totals
-	1999-00	1,571	1100			873				3544
-	2000-01	1,518	681		5631	596	905			9331
-	2001-02	1,624	903		4830	710	579			8646
-	2002-03	1,736	1108		5347	795	577			9563
-	2003-04	2,114	3018	84	5610	978	649			12453
_	2004-05	2,563	2793	48	5094	799	785			12082
_	2005-06	2,428	2689	32	5021	859	888	145		12062
	2006-07	2,666	2377	43	4590	673	818	147		11314
Number of Building	2007-08	2,227	2784	103	5669	932	799	145		12659
Complaints/Disputes to	2008-09	2,782	2133	133	5805	1045	799	96		12793
Regulator	2009-10	2,667	3310	186	6113	1360	828	128	73	14665
	2010-11	3,008	2837	49	5625	1055	852	72	171	13669
	2011-12	3,612	3091	83	4726	1148	815	99		13574
	2012-13	3,742	2799	180	4843	975	815	152	303	13809
	2013-14	3,814	2876	142	3894	948	868	171	305	13018
	2014-15	3,128	3066	278	4793	1181	964	200	350	13960
	2015-16	3,071	9221	266	3927	1201	912	229		12360
	2016-17	1,850	9194		4015					15059
	2017-18	1,525	8548		4380					14453
	1999-00	39.4	21.9			125.5				23.7
	2000-01	39.3	16.4		231.3	93.7	62.4			72.6
	2001-02	43.1	25.5		157.6	108.3	41.0			67.7
	2002-03	40.0	25.3		156.3	89.8	32.9			62.6
	2003-04	49.3	68.7	37.2	148.0	104.0	36.9			79.3
	2004-05	60.5	62.9	18.3	131.0	80.4	42.0			75.7
	2005-06	57.5	73.7	12.1	131.5	82.9	42.4	148.1		78.2
	2006-07	69.0	78.6	17.7	120.8	70.3	34.2	114.0		77.3
Complains/Investigation	2007-08	60.4	105.5	36.9	144.1	86.7	35.4	196.2		89.4
s PER 1000 completed	2008-09	67.4	76.7	47.6	151.0	94.6	37.9	79.1		87.6
residential constructions	2009-10	58.2	130.6	68.1	181.9	115.3	38.5	116.2	22.1	101.0
	2010-11	60.5	101.8	15.7	189.4	99.1	38.6	77.5	46.4	92.5
	2011-12	72.0	115.5	33.6	179.8	121.2	43.2	105.4		97.7
	2012-13	76.3	86.8	87.1	169.9	123.4	45.9	123.7		96.1
	2013-14	77.2	76.2	77.0	135.2	113.3	36.4	83.9		83.2
	2014-15	56.7	66.6	115.7	125.1	108.4	34.8	88.8	74.8	74.5
	2015-16	52.3	176.2	144.3	103.0	143.5	38.3	112.4		79.0
-	2016-17	28.3	148.0		83.8		00.0			
-	2017-18	23.2	132.8	0.0	99.8	0.0	0.0	0.0		73.0



APPENDIX P: HOME BUILDING COMPENSATION DATA

	Victoria				NSW				QLD			
	Claims	%	Ave cost per claim	Cost per 1000 homes	Claims	%	Ave cost per claim	Cost per 1000 homes	Claims	%	Ave cost per claim	Cost per 1000 homes
Failure to commence	189	2.30%	\$18,460	\$4.49	248	3.89%	\$23,310	\$9				
Failure to complete	1,918	25.20%	\$60,806	\$150	1700	26.65%	\$83,699	\$227	4,722	20.76%	\$22,989	\$187
Structural defect	3,117	52.70%	\$40,085	\$161	3333	52.25%	\$101,001	\$536	11456	79.24%	\$21,336	\$336
Other (non-structural)												
defect	1,169	19.30%	\$26,795	\$40	424	6.65%	\$52,073	\$35	6562			
Total	6,393	100.00%	\$43,232	\$356	5705	100.00%	\$88,831	\$807	22740	100%	\$13,342	\$523

	NSW Net incurred costs (\$000)	VIC Net incurred costs (\$000)	QLD Net incurred costs (\$000)
Failure to commence	\$5,780,882	\$3,489,000	
Failure to complete	\$142,288,036	\$116,626,000	\$108,544,040
Structural defect	\$336,635,477	\$124,946,000	\$128,363,720
Other (non-structural) defect	\$22,079,122	\$31,323,000	\$66,479,094
Total	\$506,783,517	\$276,384,000	\$303,386,854

Endnote references

- ¹ AUSTRALIAN JOBS 2018, Department of Jobs and Small Business 2018
- ² Defect Costs in Residential Construction Mills et al Journal of Construction Management (Jan 2009)
- ³ The staffing, revenue and budgets in relation to SIRA and the Long Service Payment Corporation are not included in the totals as they do not regulate the building industry. The totals have assumed only 10% of Safe Work regulatory capacity is directly involved in regulation to the industry. iCare revenue from HBC sales are excluded from revenue totals as these funds are to provide consumer protection.
- ⁴ In July 2017 NSW Fair Trading Division was abolished and all of NSW Fair Trading transferred to Better Regulation Division.
- ⁵ SIRA not directly involved in regulation the building and construction industry. Its function is to regulate iCare HBCF.
- ⁶ SafeWork is also part of the Better Regulation Division of the Department of Finance Service & Innovation
- ⁷ DFSI Annual Report 2017-18, page 146
- ⁸ DFSI Annual Report does not provide clear information in relation to the number of employees within SafeWork NSW or the number working specifically in roles related to the building & construction industry. An estimate of the EFT has been derived from the operating budget indicated in DFSI Annual Report. A subset of this EFT would be involved in regulation relating the building & construction sector.
- ⁹ Not all SafeWork employees would be involved in regulation of the building and construction industry. An assumption has been made that 10% of its EFT's are directly involved in building industry regulation.
- ¹⁰ Work Safe Victoria Annual Report does not provide separate revenue, staffing and budget for Compliance Activity. Accordingly, this analysis will assume the same figures as NSW.
- ¹¹ VMIA revenue from DBI sales are excluded from revenue totals as these funds are to provide consumer protection.
- ¹² The MVIA Annual Report for 2017-18 does not articulate expenditure and budget specifically for DBI. An assumption is made that, given the level of construction in Victoria, budget and expenditure are similar to that incurred by iCare in NSW.
- ¹³ WorkCover QLD Annual Report does not provide separate revenue, staffing and budget for Compliance Activity. Accordingly, this analysis will assume the same figures as NSW.
- ¹⁴ The staffing, revenue and budgets in relation to QLeave and CSQ were not included in the totals as they do not directly regulate the building industry.
- ¹⁵ VMIA Annual Report 2017-18 p.6
- ¹⁶ Master Builders recommends that the Board Governance structures for the NBCC should seek to emulate the provisions set out with the *Queensland Building & Construction Commission Act 1991*
- ¹⁷ iCare Annual Financial Statements 2017-18 (section 5.3), p.246.
- ¹⁸ VBA Annual Report 2017-18, p.69.
- ¹⁹ Building Claims represent 5.2% of claims within NCAT's Commercial Division (Budget of \$50.3m x 5.2% = \$2.6m. 2870 disputes case = \$905 per dispute (NCAT Annual Report 2017-18),p.88
- 20 VMIA Annual Report 2017-18, p.31
- ²¹ Defect Costs in Residential Construction Mills et.al Journal of Construction Management (Jan 2009)
- ²² This research utilised Victorian HGF domestic building insurance claims data 1982 to 1997.
- ²³ Current processing fee for building contractor licences in NSW.