



# BIM Ready

BIM CAPABILITY OF QUEENSLAND  
ARCHITECTS IN 2018

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Association of Consulting Architects QLD/NT  
Australian Institute of Architects QLD

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# BIM Ready

## BIM CAPABILITY OF QUEENSLAND ARCHITECTS IN 2018

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## Introduction

In February 2017 the Queensland Government, through the then named Department of Infrastructure and Local Government and Planning released their 'Building Information Modelling – draft policy and principles for Queensland.' This draft policy was released for public consultation which closed in April 2017. The draft policy proposed that projects where feasible delivered by State Government from 2020 would require Building Information Modelling (BIM) deliverables.

In a proactive move the Association of Consulting Architects QLD/NT branch (ACA) and Australian Institute of Architects QLD branch (AIA) signed an MOU and formed a BIM Taskforce to assist the Queensland Architectural profession understand and adapt to the incoming BIM Policy through the following actions.

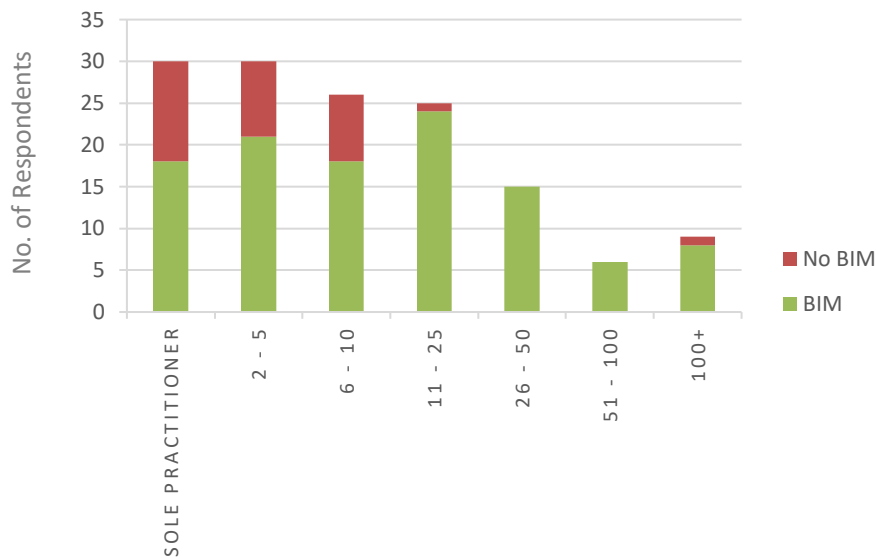
1. Provide quarterly updates on industry movement and government requirements through joint newsletter reports.
2. Investigate the viability of providing BIM training to architects for required skills through joint CPD events or training series similar to PALS.
3. When Policy or Standards are mandated that we provide Practice Notes (or equivalent) to assist in implementation.

Prior to setting a path and direction for the committee a survey was created and sent to members of ACA and AIA to complete. Overall the results from the survey present a strong starting point for the profession. Many Architects in Queensland are already using BIM processes to deliver projects without clients specifying or requiring it.

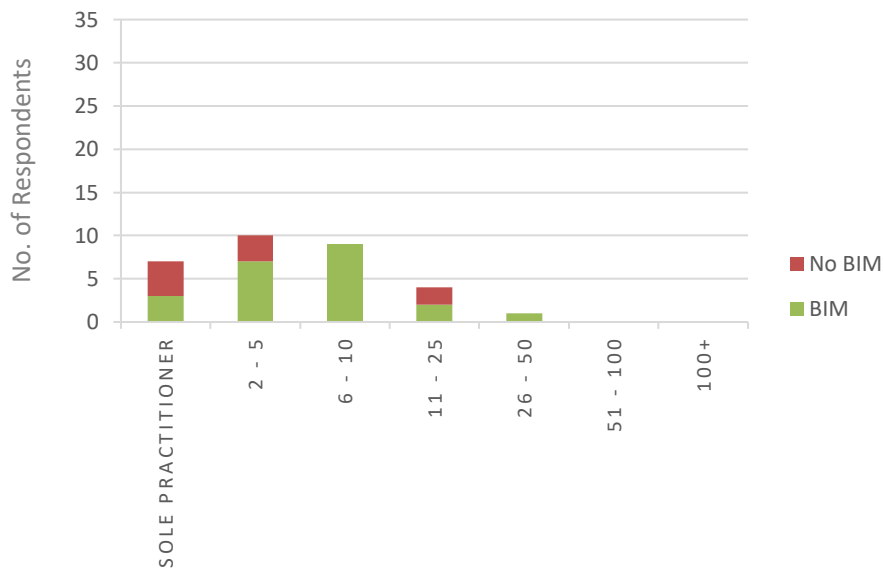
Over the next 2 years the Taskforce will deliver content and recommendations aligning with the three nominated actions to ensure that the Architectural profession in Queensland is BIM Ready for the State Government's BIM requirements.

## Findings – Practice Demographics

Overall the survey had a total of 172 responses, of those responses 141 (82%) were metropolitan based and 31 (18%) regional based. Of those practices 78% of metropolitan practices use BIM and 71% of regional practices advised that they used BIM processes. The results also demonstrate that the majority of practices that have over 25 staff used BIM processes with the percentage of non-BIM use being highest at the sole practitioner level reducing as it approached more than 25 staff.

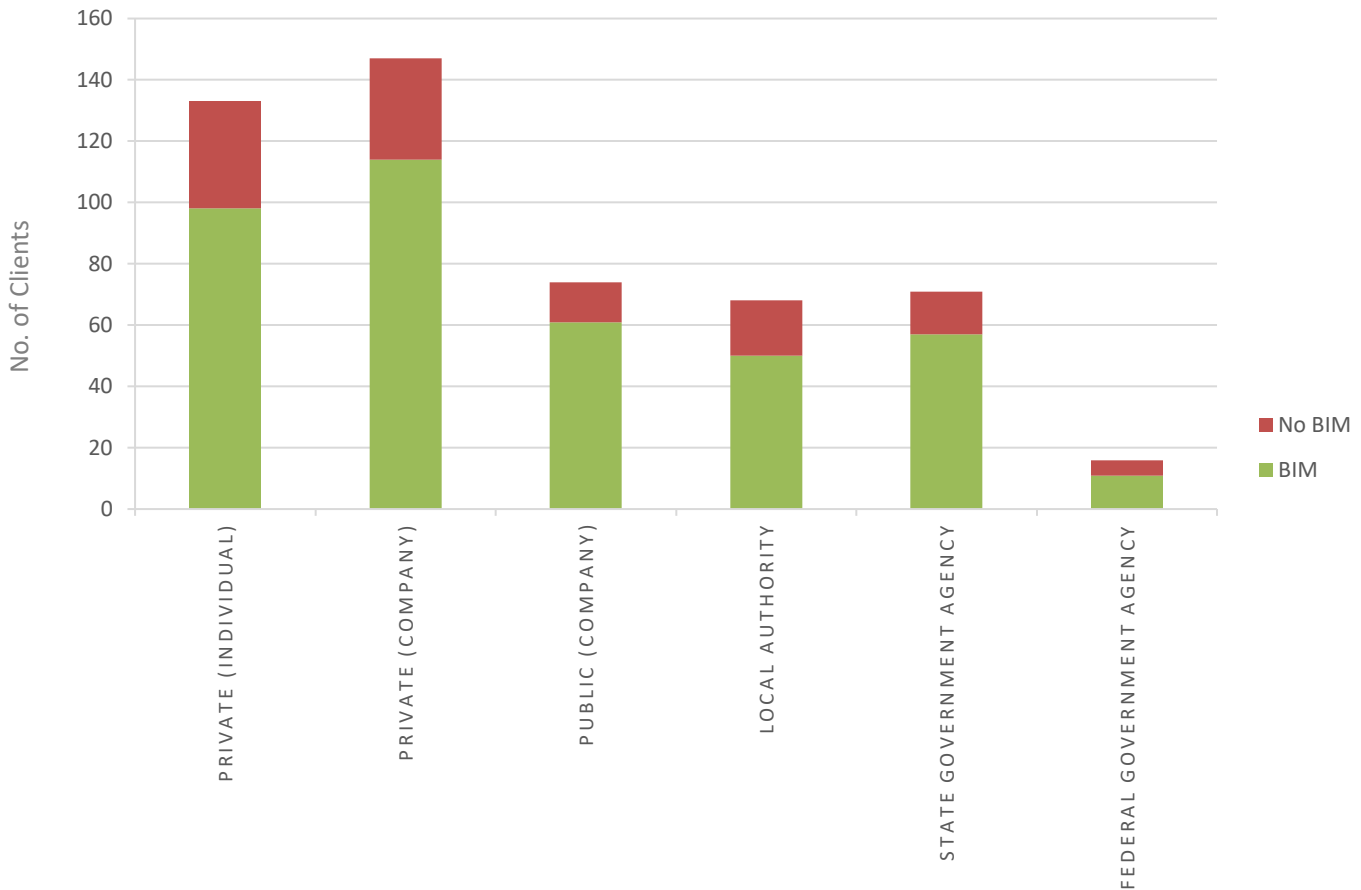


### Metropolitan Architects



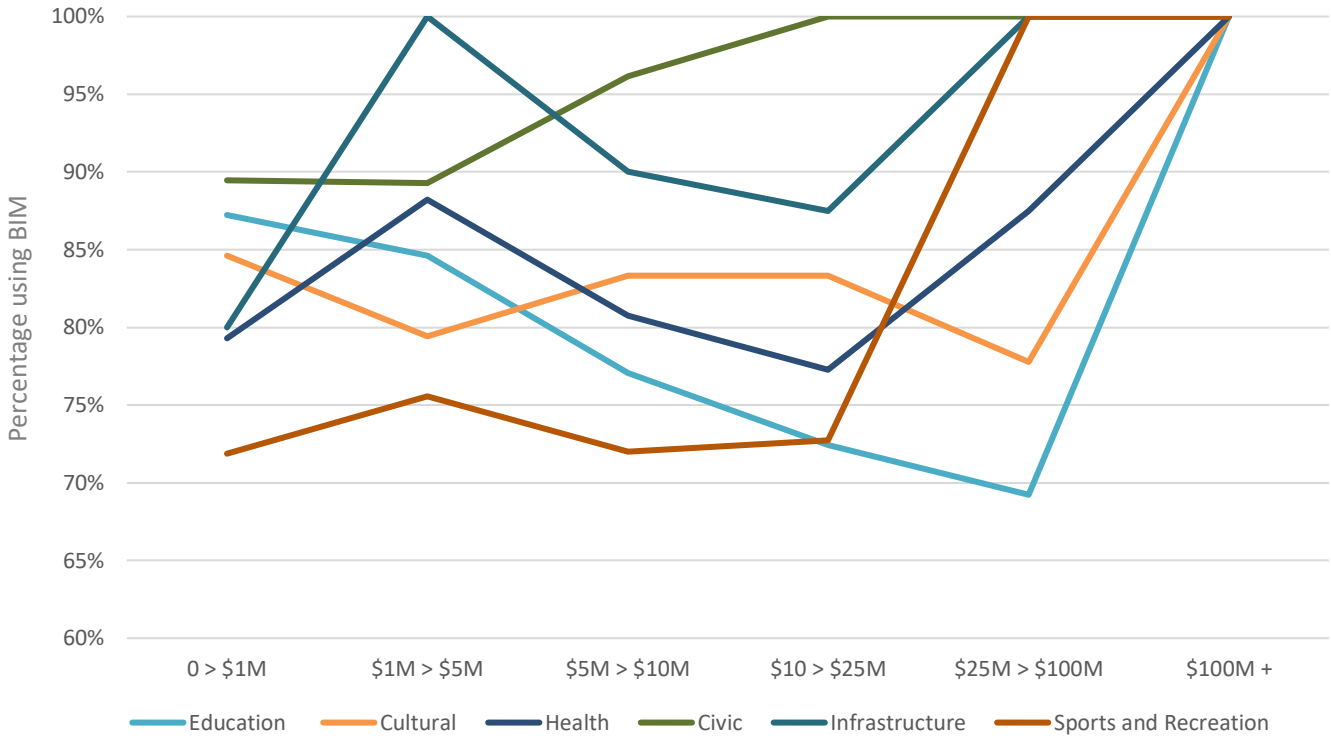
### Regional Architects

## Findings – Client Types



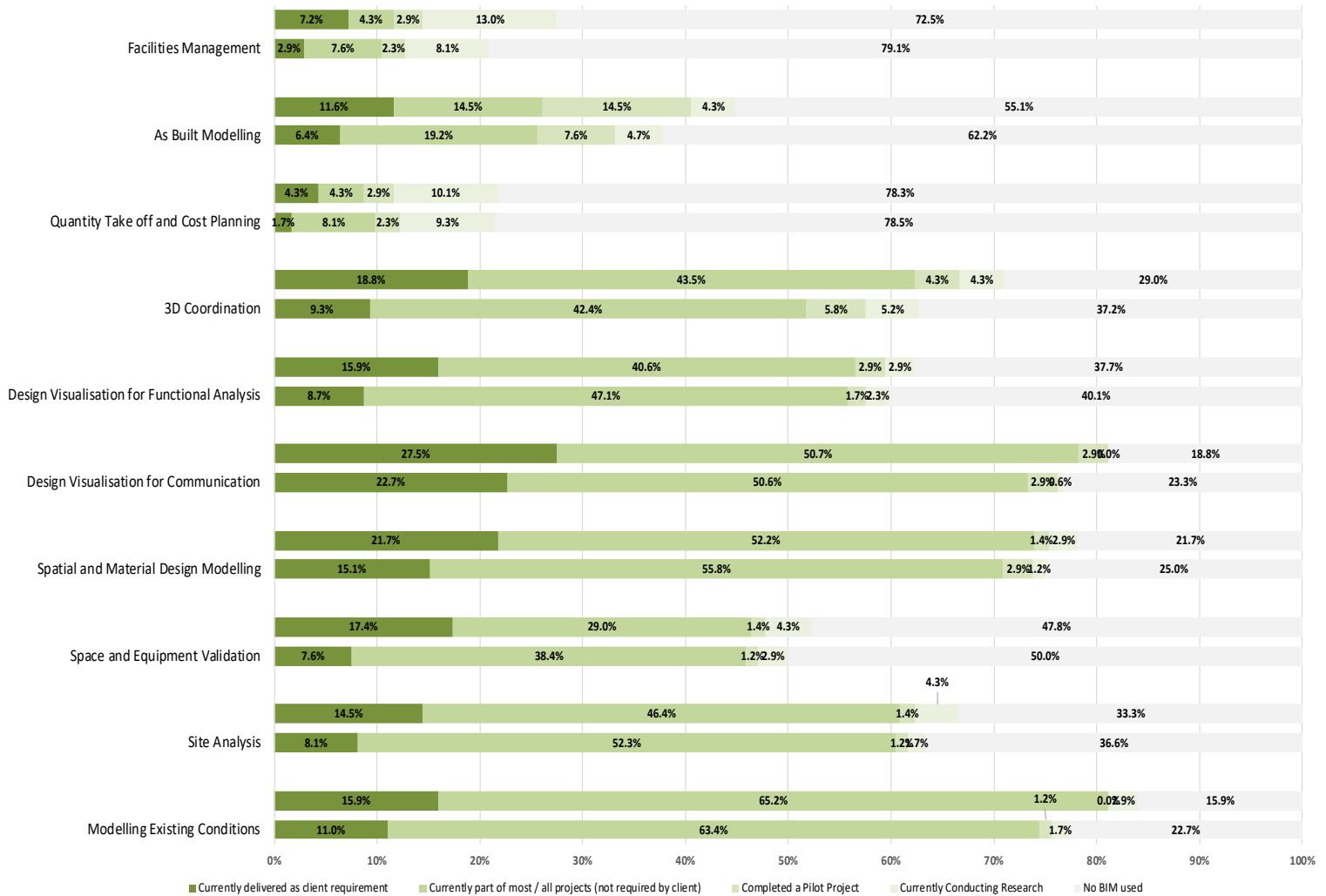
Client type hasn't driven any abnormalities in BIM usage with BIM usage based on client type sitting between 69-82% in all of the client types. The key statistic being that 41% of the respondents provided Architectural Services for a State Government Agency. Of these respondents 80% of them currently use BIM processes putting a clear majority of Architectural practices that currently provide services to the State Government in a strong position to adapt to meet BIM deliverables from Government.

## Findings – Project Type and Scale



The results of BIM use by practices vs the project type and scale that they are providing services for produced unexpected scattered results with dips appearing across a number of project types in the \$1M - \$25M ranges. Key findings to take from this graph is that all practices that are working on projects over \$100M are using BIM and across all project types that the State Government would procure all sit over 70% BIM usage already.

## Findings – BIM Uses



To gain a true understanding of the current level of BIM usage occurring within the profession it needs to be pegged against a common source. The table above shows BIM uses included in the NATSPEC BIM Guide. This is a source document that a number of practices in Queensland use as a base for their BIM Management Plans.

To gain a better understanding of the current profile of architects using BIM, the results have been split into all respondents as the bottom bar and respondents that currently provide services to State Government Agencies as the bar immediately above it.

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At a high level across all BIM uses Architects that currently provide services to State Government Agencies are utilizing BIM at a slightly greater level than the group as a whole.

The positive that can be taken from this graph is that despite the very low requirements by their current clients across the majority of BIM deliverables, a large number of Queensland Architects are either currently using BIM processes on their projects, have undertaken a pilot project or are currently conducting research into specific BIM processes.

The low BIM usage in the Quantity Take off and Cost Planning, As Built Modelling and Facilities Management categories are a stand out for low client requirement and low Architect use.

The low usage of BIM for Quantity Take off is aligned with the Quantity Surveying profession working to develop processes and methodologies of implementing BIM into standard practice<sup>1</sup>

The low usage of BIM for As Built Modelling and Facilities Management is probably due to there being no benefit for a Consultant in undertaking this level of service if they are not being engaged and remunerated by their client to do so.

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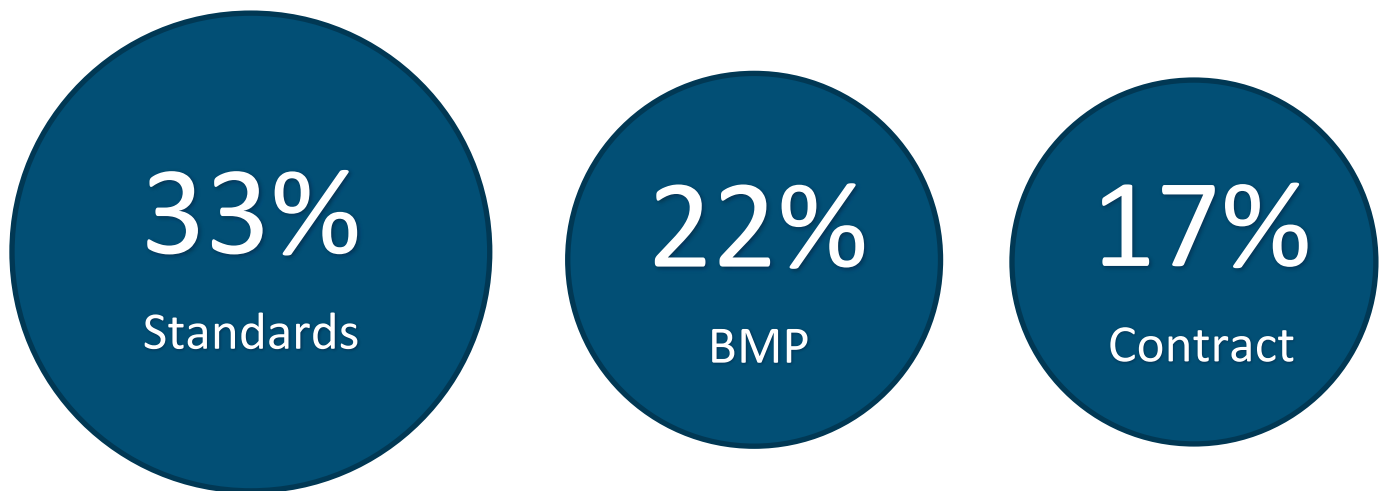
<sup>1</sup> [The Building Economist – September 2017 – The BIM Issue](#)



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## Findings – Standards, BIM Management Plans and Contracts

When it comes to Standards the biggest challenge we face here in Australia is that there are no BIM delivery Standards in place. In other countries there are well documented standards including the UK and North America which some of respondents nominated as the standard they were following. A number of the respondents out of the 33% that nominated that they were using a standard stated that they were following software based standard ANZRS or an internal standard.



Disappointingly BIM Management Plan usage of BIM users was extremely low at 22%. Of those respondents that did use a BMP a large number of respondents advised that they used a modified NATSPEC template.

The level of usage of BIM inclusions in the Client Architect Agreement at first appearance is low at 17% but when you look through the client deliverable requirements a number of the client required deliverables have been a traditional deliverable from Architects in traditional delivery practice.

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## Conclusion

The Survey results indicate that the level of BIM capability perceived by the Design industry is exceeding the client delivery requirements, however the BIM requirements of the client/construction groups at this stage are not fully defined and do not have the clarity to provide an explicit framework for the Design industry to aim for. It is important that there is a solid baseline understanding of the current and possible future BIM requirements with the capability to be nimble enough to meet any future industry needs. If the Queensland Government was to endorse a BIM policy for mandatory BIM deliverables from 2020<sup>2</sup> the profession should be well placed, with additional training to be BIM Ready in time.

With 80% of respondents that provide services for State Government already started on their BIM implementation journey the number of Architects requiring starting from no BIM capability is minimal.

The ACA | AIA BIM Taskforce will continue to increase awareness of BIM requirements through quarterly newsletters and articles.

The Taskforce is currently investigating options for its members to provide training in accordance with the APCC & AFIC BIM Knowledge and Skills Framework.<sup>3</sup> This training may be delivered by an RTO or delivered as a structured course similar to the PALS series delivered currently by the AIA.

Prior to Architectural Practices developing internal processes and delivery systems the State Government will need to nominate standards and document their Information Deliverables. Once the client-side templates are in place the Taskforce will write Architectural Practice Notes for Acumen and use by ACA members. These Practice Notes will provide advice for Architects on how to meet the State Government's requirements.

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<sup>2</sup> Date nominated in the Draft Policy. May not be the same date in a future endorsed policy.

<sup>3</sup> [APCC & ACIF BIM Knowledge and Skills Framework](#)