



Government of **Western Australia**
Department of **Health**

Managing public health risks in public buildings in Western Australia

Discussion paper



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2 Executive summary

Public buildings are a cornerstone of community participation. They provide space for people to gather for entertainment, sports and recreation, worship, education and countless other purposes. These buildings must be safe and fit for the activity being performed, and able to be managed effectively in an emergency.

Historically, public buildings have been proactively managed by local governments and the Department of Health (DOH) through the *Health (Miscellaneous Provisions) Act 1911 Part VI* and the *Health (Public Buildings) Regulations 1992*. With the review of the regulations, there is an opportunity as a community to decide how to continue to ensure that public buildings in WA are managed in the safest and healthiest way possible. Good management includes measures to ensure that public buildings:

- are appropriately and safely designed for the activities being undertaken;
- have safe access and egress for all patrons and emergency services at all times;
- contain frequently maintained emergency equipment; and
- have appropriate plans in place for risks and emergencies of all kinds.

The DOH believes the best way to keep people safe in public buildings is by continuing to regulate them. This paper presents a number of potential reforms for discussion. These have been developed through preliminary consultation with those who regulate public buildings: local government authorised officers. The proposed reforms are risk-based, in line with approaches under the new *Public Health Act 2016*.

Community input is now sought on the proposed methods for management, and comments will inform the development of a final approach. Your input on this important issue is welcomed.



A black and white photograph of a grand, ornate theater interior. The scene is dominated by rows of dark, upholstered seats facing a stage area. Above the seating, there are three levels of ornate, curved balconies with decorative railings. The walls are highly detailed with classical architectural elements, including arches, columns, and intricate carvings. Several large professional video cameras on tripods are positioned on the balconies and in the upper part of the theater, suggesting a recording or broadcast session. The lighting is dramatic, highlighting the textures and details of the architecture.

The aim of the public buildings regulatory review is to examine the risks to health and safety in public buildings, and discuss options for their management into the future.



How to make a submission

This document contains a series of questions related to the ideas presented. You do not have to comment on all of the questions, and can provide feedback that may not be related to any of the questions.

Please explain the reasons behind your suggestions, and where possible use evidence such as statistics, cost estimates and examples of solutions.

Online survey

Complete the online survey, which may be accessed at <https://consultation.health.wa.gov.au/environmental-health-directorate/public-buildings-regulation-review>

Written submissions

Submissions must be received by **5:00pm (WST), Thursday 17 January 2019**. Late submissions unfortunately cannot be considered.

Written submissions lodged by email (preferred) can be sent to publichealthact@health.wa.gov.au

Hard copies can be posted to:

**Public Buildings Review
Environmental Health Directorate
Department of Health
PO Box 8172
Perth Business Centre
WA 6849**

Consultation on the management of public buildings

A Public Buildings Working Group was formed to review the existing *Health (Public Buildings) Regulations 1992* (Public Buildings Regulations). This is to ensure the views of local government enforcement agencies and other stakeholders are represented in the development of future management strategies related to public health risks in public buildings. The group is made up of authorised officers from metropolitan and regional local governments, officers from the Department of Mines, Industry Regulation and Safety - Building and Energy division (formerly the Building Commission and EnergySafety) and local government building surveyors.

This paper is released to seek submissions and feedback from the wider community and other government agencies and stakeholders. Analysis of submissions will inform the development of final proposals.

3 Introduction

In WA, the use of public buildings for celebratory, entertainment, sporting, recreational, social and religious purposes is commonplace. Approximately 80% of Western Australians attended at least one venue or event in 2009-10 [7].

3.1 What is a public building?

The current definition of a public building is broad, and captures most public areas where people gather for a pre-determined purpose. The *Health (Miscellaneous Provisions) Act 1911* (Health (MP) Act) states that a public building is:

(a) A building or place or part of a building or place where persons may assemble for –

- (i) civic, theatrical, social, political or religious purposes;*
- (ii) educational purposes;*
- (iii) entertainment, recreational or sporting purposes; and*
- (iv) business purposes; and*

(b) any building, structure, tent, gallery, enclosure, platform or other place or any part of a building, structure, tent, gallery, enclosure, platform or other place in or on which numbers of persons are usually or occasionally assembled, but does not include a hospital.

There are an estimated 5787 public buildings in WA, according to local government reporting data collected by the DOH. Of these, 11% are estimated to be high risk premises, 38% medium risk premises and 51% low risk premises.

At present, public buildings include:

- Amusement centres
- Auditoriums
- Bars
- Billiards centres
- Churches
- Cinemas
- Circuses
- Community centres - aged, youth etc.
- Concert halls
- Convention areas
- Dance/performance centres
- Dog tracks - public areas only
- Drive-in cinemas
- Entertainment centres
- Function centres
- Grandstands
- Gymnasiums (classes and group activities)
- Halls
- Hotel function and entertainment areas
- Indoor sports courts
- Karaoke bars
- Lecture theatres
- Local authority civic centres
- Multipurpose recreation centres
- Museums
- Nightclubs
- Open air temporary stand & stages
- Pre-schools (operated by community organisation)
- Public swimming pools
- Race courses – public areas only
- Restaurant function rooms
- School auditoriums, private
- Show grounds
- Skating rinks
- Speedways (enclosed type) – public areas only
- Sports stadia
- Sporting club buildings
- Taverns
- Temporary seating stands
- Temporary structures (e.g. circuses, concerts, shows)
- Theatres
- Universities
- Youth club buildings

As part of this review, it is being proposed that this definition be changed to include, exclude and manage these buildings based on risk level rather than purpose.

3.2 What is an event, and how does it fit?

Events (including open air temporary structures) are currently regulated under the Public Buildings Regulations in the absence of their own specific legislation. As these regulations were not written with events in mind they do not directly fit this purpose; they require a defined area to assign a maximum capacity, and contain requirements which may be irrelevant to outdoor venues.

The DOH intends to propose the development of a new set of regulations for events as part of the *Public Health Act 2016* (Public Health Act) review. This is the approach recommended by the Economics and Industry Standing Committee's Parliamentary Inquiry into the 2011 Kimberley Ultramarathon disaster, which left participants with life threatening injuries.

It is expected that a discussion paper on the development of events regulations will be released in late 2018, and therefore those issues will not be covered in this paper.

3.3 What is an authorised officer?

Authorised officer is the term used under the Public Health Act to describe the people who have the powers to enforce the Act. At present, the majority of officers who enforce the Public Buildings Regulations and conduct inspections are Environmental Health Officers in local government agencies. .

3.4 Why are the regulations under review?

In the lead up to stage 5 of implementation of the Public Health Act, the DOH is reviewing all regulations adopted under the Health (MP) Act.

The review must determine whether the associated public health risks should continue to be regulated under the new regulatory framework, or whether they can be effectively managed through a guideline, local law or other legislation instead.

In 2015, the DOH requested feedback from local governments on public buildings as part of an optional reporting survey. Some of the comments provided by local government include:

- The definition of a public building is too vague and needs improvement;
- A risk matrix should be provided to exclude small and low risk buildings;
- Standards should be the same in Crown and non-Crown buildings; and
- Events should have a separate approval process to public buildings.

3.5 Should we continue to regulate?

This discussion paper will examine the risks and issues associated with the operation of public buildings and seek comment on proposed options for management. Benefits and risks have been compared for both continued regulation and deregulation.

Based on an assessment of risk and preliminary consultation, the preferred approach of the DOH is continued regulation, scaled where possible to reflect the level of risk. A range of proposals for modernising the legislation have been outlined.

3.6 Can we transition the existing legislation 'as is' into the new Act?

The Health (MP) Act and the Public Health Act are very different types of legislation, and the existing regulations can't be directly transitioned across. In their present form they are highly prescriptive, whereas the

new Public Health Act takes a risk-based approach and uses different tools to achieve outcomes.

The review is also an opportunity to consult with the community and enforcement agencies to discuss issues in the existing regulations.

Options for future management of public buildings

The DOH has identified two options for the future management of public buildings. These are discussed in detail from page 20 onwards.

Option A: Take no action (repeal without replacement)

Issue guidelines and encourage industry self-regulation

Use the general public health duty to reactively address issues

Option B: Provide new, updated regulations under the *Public Health Act 2016*

Ongoing regulatory requirements, including proposed changes under three key themes:

Improving administration

- Proposal 1:** Amend the definition of a public building
- Proposal 2:** Requirement for registration
- Proposal 3:** Requirement for an annual or other fee

Protecting public safety

- Proposal 4:** Amend risk management plan requirements
- Proposal 5:** Improve transparency of Performance Solutions
- Proposal 6:** Requirements for temporary structures

Removing red tape

- Proposal 7:** Repeal electrical requirements from the Public Buildings Regulations
- Proposal 8:** Repeal requirements adopted into the BCA 2019
- Proposal 9:** Repeal various other requirements

4 Risks to public health

Incidents associated with the gathering and assembly of people in public buildings have triggered the development of a vast range of building codes, regulations and guidelines globally. Significant research into evacuation and crowd dynamics attempts to understand

why these incidents still occur despite standards being in place.

The table below details a number of global incidents in public buildings and contributing factors.

Date	Location	Disaster/incident	Casualties	Contributing factors	References
1973	Whisky Au Go Go Nightclub Fire, Australia	Building was maliciously firebombed and exits were compromised	15 deaths	<ul style="list-style-type: none"> Blocked emergency exits including the front entry Fire escape stairs and door knob were greased 	Patrikios, 2017 Grey Literature [8]
1981	The Stardust Nightclub Fire, Ireland	Deliberate fire was set in an alcove	48 deaths 214 injured	<ul style="list-style-type: none"> 2 exits were locked/partially obstructed Flammable carpet materials used in the building Lack of regular fire drills and inspections prior 	Coffey, 2012 Commission of Inquiry Report [9]
1985	Bradford City Stadium Fire, UK	Viewing stand allegedly caught alight due to discarded cigarette butt	53 deaths 240 injured	<ul style="list-style-type: none"> Smoking in stadium Structural deficiencies/use of combustible materials A number of exits were locked Poor medical provision 	Popplewell, 1986 Commission of Inquiry Report [10]
1992	City College Crowd Crush, USA	Oversold crowd attempted to enter a gymnasium with insufficient access	9 deaths	<ul style="list-style-type: none"> Funnelling of crowd through a single doorway at the bottom of a stairwell Overcrowding due to gate-crashers 	Berger, 1992 Grey Literature [11]
1997	Uphaar Cinema Fire, India	Faulty transformer caused fire, crowd crushing resulted in an attempt to escape	59 deaths 100 injured	<ul style="list-style-type: none"> Combustible materials present Illegal additions to the building post-construction Closure and bolting of exits Inadequate electrical repairs to transformer 	Venkatesan, 2007 Grey Literature [12]
2001	Indigo Club Crowd Crush, Bulgaria	Crowd crush at slippery entrance	7 deaths 6 injured	<ul style="list-style-type: none"> Entrance to the club was at the base of a set of stairs, which were icy due to freezing conditions 	Peachey, 2001 Grey Literature [13]
2003	E2 Nightclub Crowd Crush, USA	Use of mace by guard to break up a fight triggered crowd crush	21 deaths 50 injured	<ul style="list-style-type: none"> Owners had kept the club open despite 11 building violations and a closure order Severe overcrowding Lack of exits and doors barred by security Unaware patrons believed it was chemical warfare 	People ex rel. City of Chicago v. Le Mirage, Inc., 2011 [14]
2003	Station Nightclub Fire, USA	Pyrotechnic device ignited flammable sound-proofing material	100 deaths 200 injured	<ul style="list-style-type: none"> Pyrotechnics ignited illegal, highly flammable sound-proofing foam Unequal use of exits and blocking by security Required automatic fire systems not in place due to change in occupancy 	Tidwell, 2012 Grey Literature [15]
2012	Steve Aoki Halloween Concert, Spain	Flare was set off triggering panic to escape	5 deaths 2 injured	<ul style="list-style-type: none"> Flare was set off near the only exit Insufficient exits provided – ingress and egress at the same point Overcrowding due to overselling of tickets 	Aunion, 2016 Grey Literature [16]
2013	Kiss Nightclub Fire, Brazil	Pyrotechnic device ignited the ceiling of the building	242 deaths 630 injured	<ul style="list-style-type: none"> Pyrotechnic show leading to fire hazard Overcrowding due to over selling of tickets Lack of emergency exits Security initially prevented people from leaving 	Darlington and Carter, 2013 Grey Literature [17]
2014	Mayweather Jr. Crowd Crush, USA	Crowd crush set off after the fight following a loud bang	50 injured	<ul style="list-style-type: none"> Gunshot-like bang sparked crowd panic Crowd stormed out the gates into a narrow walkway 	Velin, 2014 Grey Literature [18]
2016	Oakland Warehouse Fire, USA	Fire broke out in a warehouse hosting an illegal concert	36 deaths	<ul style="list-style-type: none"> Lack of emergency exits and fire systems Complicated building layout and clutter present in the building restricted adequate egress routes Electrical problems present in the building Noncompliant staircase built from wooden pallets 	Oakland Fire Department, 2016 Origin and Cause Report [19]
2017	Manchester Arena Bombing, UK	Suicide bomber detonated a bomb in the foyer exit of the venue	22 deaths 512 injured	<ul style="list-style-type: none"> Suicide bomber detonated improvised explosive device in the foyer exit Following the attack, patrons sought to exit the building. This caused crowd crushing and resulted in more people moving toward the site of danger 	Baker, 2017 Grey Literature [20]

Figure 1: Selection of public building incidents and contributing factors

As demonstrated in figure 1, the most extreme personal risk when gathering in public buildings is injury and death. This may occur as the direct result of a hazard, such as a fire, shooting or structural collapse, or from a crowd surge incident which may or may not be triggered by such an emergency. Even a perceived or rumoured threat can be enough to trigger a crowd incident.

In addition to a devastating loss of life or quality of life, such disasters may cause embarrassment and financial burden for all parties involved including government agencies. Costs associated with hospitalisation, ongoing treatment, legal payouts and loss of productivity may number well into the millions. These disasters also often have far-reaching psychological and social impacts that are difficult to quantify [21].

4.1 Influencing factors

Crowd disasters are an interaction between a range of complex systems [22], so management of contributing factors can affect the outcomes in an emergency. Common factors contributing to injury and death as described in figure 1 include:

- obstructed, locked or compromised exits and entrances;
- overcrowding;
- poor design and use of inappropriate materials; and
- lack of information or emergency response.

Design guidance alone cannot guarantee safety, and managing a building's safety systems and how it is used is vital. Some of the tools used to manage this risk under the Public Buildings Regulations include:

- conducting audits of buildings and exits;
- requiring evacuation plans, risk management plans and other emergency management plans; and
- assigning maximum occupancy numbers.

4.2 Risk assessment

The intent of the Public Health Act and subsequent regulations is to ensure there are measures in place to prevent, control or abate a public health risk. This helps to recast the Act from being simply reactive – dealing with problems that have already occurred – to being proactive, looking ahead to the structures and initiatives necessary to avoid issues and keep the community safe. Therefore, future management approaches must be based upon an understanding of associated risks.

A risk assessment has been undertaken in accordance with the risk assessment model provided by the 2011 Health Risk Assessment (Scoping) Guidelines, DOH (further information on this method is provided in appendix 3).

Figure 2 below details application of the risk assessment model and the following conclusions have been made:

- A number of high and extreme risks associated with public buildings were identified.
- A number of high and extreme risks are currently managed/controlled under the Public Buildings Regulations and other regulations and guidelines.
- A range of factors may cause and/or contribute towards incidents in public buildings, and not all of these can be controlled with design guidance.

Figure 2: Public health risk assessment: risks associated with public buildings

Public health risk	Cause	Other contributing factors	Who is at risk?	Severity*	Likelihood**	Risk level***	Legislation in place
Death or injury from crowd crush at egress or within venue	<ul style="list-style-type: none"> • Overcrowding and non-compliance with maximum occupancy - overselling of tickets • Actual or perceived threat triggering urgency to exit e.g. terrorist attack, fire, pepper spray release 	<ul style="list-style-type: none"> • Lack of emergency exits – inadequate numbers • Locked/obstructed exits • Poor design/obstructions/ bottlenecks restricting crowd flow • Lack of or poorly visible exit signage or emergency lighting • Inadequate crowd management – lack of provision of information to the crowd 	<p>All members of the public gathered within a public building</p> <p>Crowd control officers</p> <p>Staff</p>	Catastrophic (1)	Unlikely	High	Public Buildings Regulations
Death or injury from crowd crush at ingress	<ul style="list-style-type: none"> • Inadequate ingress systems for crowd size leading to excess queuing • Poor management causing competitive urgency to enter venue e.g limited tickets/seating, event beginning before scheduled, line-cutting 	<ul style="list-style-type: none"> • Overcrowding and non-compliance with maximum occupancy – overselling of tickets • Obstructed ingress openings • Poor provision of information • Poor crowd management 	<p>All members of the public gathered within a public building</p> <p>Crowd control officers</p> <p>Members of the public outside the venue</p> <p>Staff</p>	Catastrophic (1)	Unlikely	High	None – some LGs regulate through local laws
Death or injury from fire/smoke	<ul style="list-style-type: none"> • Deliberate fire hazard e.g. firebombing • Accidental fire hazard e.g. electrical fault, poorly maintained electrical equipment or lighting, pyrotechnics etc. 	<ul style="list-style-type: none"> • Lack of or poorly visible exit signage or emergency lighting • Inadequate ventilation • Flammable materials used for stage curtains, seating, decorative treatments, building materials etc. • Lack of emergency exits – inadequate numbers • Locked/obstructed exits • Inadequate fire safety system 	<p>All members of the public gathered within a public building</p> <p>Staff</p>	Catastrophic (1)	Unlikely	High	Public Buildings Regulations Building Regulations

Public health risk	Cause	Other contributing factors	Who is at risk?	Severity*	Likelihood**	Risk level***	Legislation in place
Slips, trips, falls	<ul style="list-style-type: none"> • Unsafe design features • Human factors e.g. intoxication • Poor building maintenance 	<ul style="list-style-type: none"> • Unsafe stair dimensions • Poorly designed handrails or single handrails • Lack of or poorly designed guardrails or balustrades • Dim lighting – particularly around changes in ground level • Intoxication – use of drugs and alcohol by the public • First time building users • Change in floor level not demarcated, or slippery surfaces 	<p>All members of the public gathered within a public building</p> <p>The ageing population</p> <p>People with disabilities</p> <p>Staff</p>	Massive (2)	Likely	Extreme	<p>Public Buildings Regulations</p> <p>Building Regulations</p>
Death or injury from a terrorist incident	<ul style="list-style-type: none"> • Malicious terrorist incident (including bioterrorism) 	<ul style="list-style-type: none"> • Lack of or poorly visible exit signage or emergency lighting • Lack of risk management plan, or plan not understood, rehearsed or shared with all staff • Poor emergency planning for venue – lack of evacuation and invacuation procedures in place • Poor venue security • Inadequate numbers of emergency exits • Locked/obstructed exits 	<p>All members of the public gathered within a public building</p> <p>Staff</p>	Catastrophic (1)	Rare/Remote	Medium	<p>Tools and guidelines provided under – <i>Australia's Strategy for Protecting Crowded Places from Terrorism 2017</i></p>
Injury from pepper spray release or other chemical release	<ul style="list-style-type: none"> • Release of pepper spray or other chemical by crowd management or police • Accidental or malicious release of pepper spray or other chemical 	<ul style="list-style-type: none"> • Security not conducting bag searches (if applicable) • Inappropriate management of hostile crowd • Overcrowding leading to crowd panic 	<p>All members of the public gathered within a public building</p> <p>Staff</p>	Major (3)	Possible	Medium	<p>Public Buildings Regulations</p>

Public health risk	Cause	Other contributing factors	Who is at risk?	Severity*	Likelihood**	Risk level***	Legislation in place
Injury or death from electrical faults	<ul style="list-style-type: none"> Faulty electrical wiring 	<ul style="list-style-type: none"> Water damage near electrical work Poorly maintained appliances and electrical wiring 	<p>All members of the public gathered within a public building</p> <p>Staff</p>	Massive (2)	Possible	High	<p>Electrical Licensing Regulations</p> <p>Public Buildings Regulations</p>
Injury or death from structural collapse, e.g. staircases, balustrades, temporary structures	<ul style="list-style-type: none"> Poorly designed or constructed building elements Environmental conditions such as extreme weather (applicable to open stadia) 	<ul style="list-style-type: none"> Overcrowding or crowd panic/crushing leading to structural collapse Incompetent or inexperienced person responsible for erecting structure 	<p>All members of the public gathered within a public building</p> <p>Staff</p>	Catastrophic (1)	Unlikely	High	<p>Public Buildings Regulations</p> <p>Building Regulations</p>

* Health consequence table adapted from the 2011 Health Risk Assessment (Scoping) Guidelines, DOH (refer to appendix 3)

** Risk likelihood table adopted from the 2011 Health Risk Assessment (Scoping) Guidelines, DOH (refer to appendix 3)

*** Final risk rating from the risk matrix (refer to appendix 3)

5 Current management

The Western Australian government has a proactive role in preventing incidents in public buildings through the application of the:

- *Health (Public Buildings) Regulations 1992*;
- Building Code of Australia, Volume 1 2016;
- *Health (Miscellaneous Provisions) Act 1911*;
- *Building Act 2011*;
- *Building Regulations 2012*; and
- associated guidelines.

Despite the universal nature of the risks, no mass fatalities have occurred in a WA public building. WA's only recorded mass crowd crush incident occurred in 2014 at the Esplanade (now Elizabeth Quay) Train Station, which is not a regulated public building. In this instance, 13 people were injured exiting an escalator.

There have also been two recorded deaths in WA associated with accidental falls from public buildings; in 2000, a 27 year old man fell from a landing outside a Subiaco nightclub [23], and more recently in 2017 another young man fell to his death from the balcony of a hotel in Fremantle [24]. Unfortunately near-misses and individual injuries are often underreported, so it is difficult to assess accurate figures.

5.1 Government responsibilities

Historically, there have been a number of conflicting or duplicated requirements between the Public Buildings Regulations administered by DOH, and the Building Code of Australia (BCA), administered by Building and Energy.

Building and Energy and DOH have negotiated in early 2018 to move a number of construction requirements previously located in the Public Buildings Regulations into the BCA 2019.

This is in line with an agreement that construction requirements are the domain of Building and Energy, while the Public Buildings Regulations should be concerned with operational requirements, ensuring ongoing safe occupation and management of the building.

5.1.1 Construction phase

Construction of a public building is addressed by the BCA, administered by Building and Energy as part of the Department of Mines, Industry Regulation and Safety.

Local governments are the main permit authority responsible for building control, issuing building permits and occupancy permits for all buildings. Building surveyors (local government or private) are responsible for assessing building plans for compliance with the BCA.

The Building Regulations also prescribe requirements for consultation with the Fire and Emergency Services Commissioner on fire safety measures.

The inclusion of public buildings requirements into the BCA will negate the need for authorised officers to assess applications for compliance with construction requirements. However, the construction phase remains the ideal time for authorised officers to work with applicants to address any maximum occupancy issues from a health perspective.

Some local governments already ensure that public building applications are also

circulated to authorised officers in Environmental Health in order for them to perform this function; however this is inconsistent between local governments.

5.1.2 Operational phase

Authorised officers in local government enforce the Public Buildings Regulations.

Authorised officers are currently responsible for:

- assessing applications to construct, extend or alter a public building (Form 1, although in most councils these are only lodged as building permits);
- providing feedback on risk management plans required under Part 2 of the regulations;
- approving evacuation plans;
- processing applications for a certificate of approval - Form 2, which includes assessing plans and calculating maximum occupancy;
- performing inspections (may be combined with food hygiene inspections) or audits to ensure compliance with the certificate of approval and requirements outlined in Part 3 through to Part 7 of the regulations; and
- obtaining electrical compliance certificates - Form 5.

5.1.3 Department of Health

The Health (MP) Act does not currently bind the Crown, therefore at present the regulation of public buildings on Crown land is not captured under legislation. This will change when the remaining Parts of the Public Health Act are proclaimed.

Public buildings in Kings Park and on Rottnest Island are not under the jurisdiction

of any local government and so currently fall to the State to regulate. The DOH assesses and approves applications to construct, alter or extend a public building in these areas and inspects regularly for compliance.

Other instances where the DOH is involved include:

- Approval of large public Crown buildings such as Optus Stadium.
- Applications where the requested occupancy number exceeds the number approved by local government (i.e. if an applicant is requesting a density higher than 0.5m² per person, or if there is no ratio for that particular building type defined in the regulations).

Current challenges

- *Responsibilities for construction and maintenance are not clearly defined, creating confusion for regulators and resulting in extra costs for industry*
- *There are inconsistencies in the application of the Public Buildings Regulations due to the broad nature of the definition, and the inclusion of events*
- *The current definition of public building may pose an unnecessary burden on small, low risk buildings*
- *Thresholds for risk management planning do not reflect the actual level of risk*
- *Performance Solutions may affect public health outcomes but information on their application is not readily available for authorised officers to use in decision making*

5.1.4 Department of Local Government, Sports and Cultural Industries

Under the *Liquor Control Act 1988*, the Department of Local Government, Sports and Cultural Industries (DLGSCI) requires that all nightclubs, clubs and entertainment/function areas comply with the provisions of the Public Buildings Regulations (s33(7) of the *Liquor Control Act 1988*).

All premises seeking a liquor licence must then obtain a Section 39 Certification which states that the premises complies with the Health (MP) Act, *Food Act 2008*, and the Building Act and Regulations.

The certification does not state maximum patron numbers and while DLGSCI often sets a maximum patron number in relation to licences under the *Liquor Control Act 1988*, this is not usually linked to an actual assessment of the patron areas.

5.2 Industry responsibilities

Owners and occupiers of public buildings are required to comply with the Public Buildings Regulations, the BCA and any other legislation that pertains to the operation of their building. Examples of the responsibilities of owner/occupiers include:

- applying for appropriate approvals;
- attending inspections with authorised officers;
- developing a risk management plan (RMP) in accordance with Australian Standards;
- developing an emergency management plan and conducting rehearsals of the plan at required intervals;
- ensuring fire safety systems are maintained and records kept;

- displaying a certificate of approval and evacuation maps for the building;
- keeping log books (e.g. maintenance, emergency lighting, exit signs);
- paying fees which may be associated with a certificate of approval or inspection; and
- ensuring exit pathways remain unobstructed.

5.3 Examples of interstate approaches

Jurisdictional management of public buildings varies, reflecting the unique circumstances and history of each State's approach. However in all states, public building safety is covered by legislation of some kind.

Currently, WA is the only state where operational safety in public buildings is regulated under health, however in the past similar provisions have been covered under public health legislation in Victoria and Tasmania (now repealed and transferred over to building legislation).

Generally, the management of safety in public buildings outside of WA is covered under building, development/planning, local government and/or fire and emergency services legislation.

Northern Territory

The Northern Territory Fire and Rescue Service conducts inspections of buildings under the Fire and Emergency Act and Regulations.

They issue maximum patron number stickers for licensed premises on behalf of the NT Department of Business (Liquor Licensing).

Queensland

Queensland's regulations are heavily focussed on fire safety, and annual requirements of public building owners/occupiers include:

- maintenance of all prescribed fire safety installations;
- documentation of all evacuation routes being clear and safe;
- an occupiers statement and fire and safety evacuation plan;
- records of appointment and re-training of Responsible Persons; and
- an evacuation practice at least annually.

Local governments also set local laws for places of entertainment, such as the Brisbane City Council which requires entertainment venues and events to operate with a permit.

NSW

Additional requirements to the BCA for NSW include egress, numbers and dimensions of exits, exit latches and safety curtains.

Approvals are assessed by planners, and must consider the number of patrons, local amenity character, building safety and management of the premises before approval. A new approval is required for a change in use.

Conditions of approval include:

- maximum occupancy
- stage management and curtains
- projection suite requirements
- emergency evacuation plans

South Australia

In South Australia, failure to submit annual certifications of Essential Safety Provisions under the *Development Regulations 2008* may trigger an inspection by the local council or the Building Fire Safety Committee. It may also trigger the revocation of a certificate of occupancy.

Victoria

An occupancy permit is required to use a place of public entertainment. This permit is also used to enforce maintenance of essential safety measures.

Conditions on the permit may consider such things as:

- safety officers and general fire safety (including use of naked flame, fireworks, explosives and shooting devices);
- evacuation procedures;
- barriers, passageways and exits, and accessibility of unsafe areas to the public;
- availability and condition of toilet facilities; and
- safety of temporary structures.

Figure 3: Examples of approaches to mass gathering regulation in other states

6 Future management options

Future management approaches must consider how to continue to manage the extreme and high risks associated with public buildings, without placing unnecessary burden upon industry and small business.

Key considerations:

- Use of public buildings may be associated with extreme and high risks to public health.
- Failure to accurately manage risks can result in huge human life and financial costs.
- Historically these risks have been managed through legislation under the DOH, therefore the body of knowledge currently sits with authorised officers.
- The BCA covers construction requirements but not ongoing management.

The risks of disaster in a public building are considered universal and while WA has not experienced a mass fatality scenario, it is pertinent to note the potential impacts of poor management. This is demonstrated here by costing a scenario from the USA, the Station Nightclub Fire.

Costing scenario: The Station Nightclub Fire, USA

On February 20, 2003, a fire destroyed The Station nightclub on Rhode Island, USA. It began after pyrotechnics ignited foam used to soundproof the walls and ceiling [1].

There were 412 people inside the building that night: 100 died and approximately 200 were injured [3].

The fire was attributed to a range of factors, including:

- *a hazardous mix of building materials;*
- *lack of automatic sprinklers; and*
- *inadequate capacity of exits [1].*

The conservative estimated cost if such an incident occurred in WA today is over \$769 million dollars. This is based on the calculations below (amounts converted to AUD and adjusted for CPI to Jun 2018).

Costs to government

Value of one statistical life: \$4,502,846 [4]

Average WA cost of hospitalisation:

\$18,857 [5]

Number of deaths: 100 [3]

Number of hospitalisations: estimated 160 (exact unknown)

Payout amounts: \$29.7 million [6] (the state of Rhode Island and the town of West Warwick).

Total cost to government: \$482,976,089 AUD

Costs to industry

28 defendants were sued a total amount equivalent to \$286.8 million AUD [6].

Further information, such as the dollar loss of the structure and business is not readily available.

Total costs to industry: >\$286,860,282 AUD (at minimum)

Total costs: >\$769,836,371 AUD

6.1 Option A: Take no action (repeal without replacement)

Without action, the existing regulations would be repealed without replacement and individual owner/occupiers would become responsible for determining public building safety.

Current certificates of approval would be removed, and occupancy would be determined by building surveyors when assigning an occupancy permit.

The DOH would provide guidance documents on minimising health risks in public buildings to facilitate the self-regulation of the industry. These would be non-mandatory with no enforcement or penalty options.

If a complaint or issue arose, authorised officers would have a number of options under the Public Health Act, including issuing improvement notices, enforcement orders and/or commencing prosecution. The DOH would provide guidance documents for authorised officers on how to apply the general public health duty.

Structural and fire safety requirements would still be covered at construction stage through application of the BCA, however without ongoing inspections and management it would be left to owners/occupiers to ensure safe operation and maintenance of emergency systems.

Question 1: Do you support the adoption of **Option A: Repeal without replacement**? Why or why not?

Question 2: Can you identify any further advantages or disadvantages of **Option A**?

Advantages

- reduced regulatory burden for local government and owner/occupier;
- allows further information to be provided in the form of guidelines for operation and management;
- may encourage more efficient business, whereby savings can be passed on to the public; and
- self-regulation may promote internalisation of ethical behaviour and principles as rules are based on social norms and peer conduct rather than top-down prescriptive requirements.

Disadvantages

- little incentive to maintain high safety standards;
- industry confusion over requirements as this area has historically been regulated by the health portfolio;
- inconsistency in approach;
- reduced public confidence in the safety of public buildings;
- no cost recovery for local government, and no fines are able to be issued under the general public health duty;
- public buildings no longer registered with local government therefore no conditions can be applied;
- maximum occupancy issued by building surveyors (who do not consider emergencies other than fire), therefore possibility of poor management of overcrowding;
- more difficult to proactively respond to emerging risks;
- more difficult to manage public building related complaints due to a lack of specific legislation; and
- flow on effects for liquor licensing which currently requires compliance with health laws before a licence may be issued.

6.2 Option B: Provide new, updated regulations under the *Public Health Act 2016*

The preferred option of the DOH is to repeal the current Public Buildings Regulations and replace them with new regulations under the Public Health Act.

As demonstrated, there are a number of extreme and high risks to public health associated with public building patronage, including the risk of injury and death in a crowd incident, a fire, terrorist or other emergency situation, or structural collapse. Many of these risks are managed under the current Public Buildings Regulations.

In continuing regulation, authorised officers would remain responsible for administering the regulations, through the local government as the enforcement agency. A proactive approach to public building management would continue, with applications to operate a public building submitted to authorised officers who would assess compliance, assign the maximum occupancy and conduct regular inspections, as currently occurs.

Proposals

If this option is adopted, a number of changes are proposed in order to create updated, more effective and consistent legislation. The changes centre around the three key themes of improving administration, protecting public safety and repealing unnecessary legislation. Provisions would not be retrospective.

The proposed measures below would align requirements wherever possible to encourage consistency in application, while recognising the need for flexibility between local government areas.

Advantages

- adequate management of public health risks associated with the use and operation of public buildings;
- public safety maintained at a consistently high standard;
- enforcement remains with authorised officers with existing expertise in this area;
- local government may utilise cost recovery for registration and inspection;
- binding the Crown ensures Crown buildings adhere to the same high safety standards as non-Crown buildings;
- consistency in the application and enforcement of legal obligations .

Disadvantages

- maintains current regulatory burden, however proposed changes seek to remove and reduce unnecessary requirements;
- regulation of Crown buildings may initially result in confusion and extra costs upon commencement;
- will require provision of information and training to those impacted.

Question 3: Do you support the adoption of **Option B: Provide new, updated regulations**? Why or why not?

Question 4: Can you identify any further advantages or disadvantages of **Option B**?

Question 5: Do you have any suggestions for alternative options that have not been considered? Please explain your ideas by providing examples of complaints, case studies, data or other evidence.

The following key changes are proposed if the preferred **Option B: Provide new, updated regulations under the *Public Health Act 2016*** is chosen.

Please note that offences, penalties and powers for authorised officers have not been discussed in this paper in full, as they are provided for by the Public Health Act. This includes powers of entry, inspection and seizure which are outlined in Part 16 of the Public Health Act.

7 Improving administration

7.1 Proposal 1: Amend the definition of a public building

The current definition does not accurately reflect those buildings that pose a public health risk. At present the definition will also overlap with new proposed regulations for events.

Proposal: Revise the definition to allow for risk based management of public buildings.

The current definition of a public building captures most buildings and places where numbers of people assemble or gather for a range of purposes, as described above.

The definition and its interpretation have come under scrutiny in the past, and around one third of local government optional reporting respondents in 2017 indicated they would like to see changes to the definition, including the separation of events and public buildings, and the removal of small, low risk venues.

It is proposed that the definition of a public building be amended:

- to provide clarity of exclusions and inclusions;
- to allow for scalable requirements to be applied based on risk;

- to exclude events, which will be captured under more appropriate legislation; and
- to exclude temporary structures, which will be subject to a separate process.

Key elements of a definition

Capacity: It is proposed that buildings with total space for less than 50 people be excluded. 50 people is the threshold below which only one emergency exit is required and is usually considered very low risk, so the exclusion of this group would reduce red tape.

Purpose: The definition should outline broad types of purposes (such as social, religious or recreation), in order to exclude spontaneously crowded places and groups of buildings regulated under other legislation.

Inclusion of outdoor areas: It is proposed that 'directly associated gathering areas', such as patios and beer gardens be included in the definition. Such areas need to be included in calculations for exits and provision of facilities, and it is believed that inclusion in the definition would bring the necessary clarity.

Question 6: Do you believe any of the current public building types should be excluded from regulation? Please explain your reasoning.

Question 7: Do you believe that excluding buildings with a total capacity of less than 50 people would have any adverse impacts on public health? Please provide specific examples.

Categorisation by risk

To most effectively manage buildings, it is proposed that they are categorised by a risk

matrix into low, medium and high risk. Optional reporting indicates that this is already informally conducted by many authorised officers; however referencing a standardised risk matrix in the regulations will encourage consistency.

By including this as a secondary component of the definition, the risk category would then be used to determine management requirements, such as:

- frequency of inspection;
- frequency of registration renewals; and
- level of risk and emergency management planning.

A proposed matrix has been developed by DOH in consultation with the Public Buildings Working Group and is included in appendix 1 for comment. It is intended that this will be referenced in the regulations, and included in full in the accompanying guidelines.

Proposed exclusions

The following types of buildings are recommended for exclusion from the definition of a public building.

Correctional centres – Correctional centres (including prisons, courts, police facilities and the like) are subject to the BCA and other relevant local government building and planning requirements. Their safety is heavily regulated by the Office of the Inspector of Custodial Services, including determination of maximum accommodation and evacuation planning.

Such buildings are also of a very different purpose, with specific functions and requirements, and so cannot be managed in the same way as other public buildings. For these reasons it is considered that their ongoing management is effectively

regulated and it is recommended that they remain excluded.

Places of child care – Centre-based child care services are subject to the *Child Care Services (Child Care) Regulations 2006*, which contains strict requirements for exits, emergency procedures and licensing (including maximum accommodation), administered by the Department of Communities.

The safe operation of places of child care is effectively managed through this Act and it is recommended that they remain excluded. This applies only to centre-based services; family day cares and associated residential services are automatically excluded as they are residential buildings.

Private health care facilities – As of January 2018, all private health care facilities are subject to mandatory requirements under the Western Australia Health Facility Guidelines for Architectural Requirements and the Western Australia Health Facility Guidelines for Engineering Services.

These two guidelines contain requirements for exits, access, signage, ventilation, lighting, fire safety and other elements of construction as well as risk management plans, fire engineering and security.

Inspections may be conducted by the Licensing and Accreditation Regulatory Unit of DOH. This level of regulation is considered adequate for the protection of health in areas of assembly and it is proposed that private health care facilities continue to be excluded.

Places of transit – Globally and locally there have been instances of crowd crushing at places of transit such as train stations (including the crush incident at

Elizabeth Quay station described above). These risks are more likely to be associated with increased patronage during events.

The Public Transport Authority is responsible for regulating areas of public transport. They are required to comply with the *Occupational Health and Safety Act 1984*, the *Emergency Management Act 2005* and associated regulations, and have extensive in-house policies and procedures including managing safety in design. Public transport facilities are inspected by station staff, safety representatives and facilities managers, with testing conducted in accordance with relevant standards. Peak hour crowds are monitored and reported by station staff.

Places of transit exist for the purpose of temporary passive assembly in preparation for movement to another location. They do not usually involve prolonged gathering to conduct an activity, and in this have a different purpose to other public buildings. As buildings are already subject to the requirements of the BCA, it is proposed that all places of transit are excluded.

Question 8: Do you support the exclusion of the buildings under 'Proposed exclusions'? Please detail the positive and negative impacts on you or your organisation.

Buildings for consideration

As part of this consultation document, feedback is sought on the inclusion or exclusion of the following types of buildings from the Public Buildings Regulations. It should be noted that all types of building are subject to design and construction requirements under the BCA.

Places of tuition – It is proposed that the regulations continue to capture school and

university assembly areas such as halls and lecture theatres based on risk. Such areas in public schools would also be captured once the Crown is bound by the new Public Health Act.

Schools often develop their own individual policies and public schools are subject to the Department of Education's policies on emergency management, occupational safety and health and security.

However there is some concern around the inclusion or exclusion of teaching rooms, given the rise of larger co-teaching environments which may contain a significant number of people.

Public health care facilities (assembly areas only) – Public health care facilities are subject to the *Health Services Act 2016* but not captured under the Western Australia Health Facility Guidelines, and as such are not subject to those additional construction and planning requirements. There is no intention to capture treatment rooms, and concern is only with areas of gathering, such as lecture theatres.

Health care facilities are required to obtain accreditation under the National Safety and Quality Health Service Standards, however these standards are client-focussed and generally not concerned with the building itself.

Shopping centres – Injury and death may result from incidents in shopping centres, including fire, acts of terror and overcrowding during entertainment or opening of sales.

While shopping centres are required to meet requirements of applicable health, safety, building and fire legislation by the *Commercial Tenancy (Retail Shops) Agreements Act 1985* and associated

regulations, it is unclear whether there is currently a central agency inspecting such areas. One option for shopping centres may be to continue to exclude them, but capture special events (such as a band performing) under the proposed events regulations.

Places of aged care (assembly areas only) – Essential security arrangements for the safety of patrons in aged care communal areas are not compatible with the public building requirements. Such facilities are regulated under a number of pieces of national legislation including the *Aged Care Act 1997* and subsidiary regulations.

Restaurants – Restaurants are not currently captured under the Public Buildings Regulations (unless they include function or conference rooms), however they are subject to regulation under the DLGSCI. Concerns around overcrowding exist as restaurants vary widely in their level of risk, and for example may accommodate a large number of people in a small space, with only one ingress and egress point.

Question 9: Do you believe that any of the 'Buildings for consideration' should be regulated as public buildings? Please explain your reasoning.

Exclusion of temporary structures

Temporary structures such as marquees, grandstands and staging, have specific requirements and should be defined separately. Further information on this and the proposed separate approval process can be found in proposal 6 (and will also be addressed in the events discussion paper).

Exclusion of events

At present, the definition of public building also encompasses events. As part of the Public Health Act implementation, a new set

of regulations will be proposed specifically for events, in recognition that they are best regulated separately from public buildings. It is proposed that events not held in a permanent building be indirectly excluded from the definition, as they will be captured in these stand-alone events regulations.

It is also proposed that any activity over and above the regular approved operation of a public building be captured as an event. This would reduce duplication by allowing public buildings to operate under one approval for any event of a pre-approved use, size or configuration.

What about the BCA definition?

Under the BCA, buildings of a public nature are classified as Class 9 buildings, and Class 9b buildings (termed assembly buildings) capture the majority of public buildings defined under the Health (MP) Act.

Assembly building means a building where people may assemble for—

(a) civic, theatrical, social, political or religious purposes including a library, theatre, public hall or place of worship; or

(b) educational purposes in a school, early childhood centre, preschool, or the like; or

(c) entertainment, recreational or sporting purposes including—

(i) a discotheque, nightclub or a bar area of a hotel or motel providing live entertainment or containing a dance floor; or

(ii) a cinema; or

(iii) a sports stadium, sporting or other club; or

(d) transit purposes including a bus station, railway station, airport or ferry terminal.

The BCA definition has been considered as an option but cannot be adapted for this use for the following reasons:

- The definition lacks the flexibility for risk-based assessment, which is key for applying scalable management options.
- A building may change in use without triggering a change in classification under the BCA, and vice versa [25]. It is the opinion of the DOH that buildings must remain fit for purpose throughout the course of their operation as public buildings, therefore an accurate assessment of purpose is vital.
- The definition does not capture all public buildings from a public health risk perspective – often small bars are classed as Class 6 buildings.
- It is the experience of authorised officers and building professionals that in some instances (e.g. a Class 9b dancefloor added to a Class 6 tavern) the definition can be manipulated to avoid compliance with more onerous requirements regarding fire safety, accessibility and egress. Effectiveness of safety control measures is therefore reduced.

Question 10: Overall, do you support the proposed changes to the definition of a public building in section 8.1? Please detail the positive and negative impacts on you or your organisation.

Question 11: Can you identify any situations where comparable regulations exist in similar buildings (that are not public buildings)? The purpose of this question is to identify any potential duplication.

7.2 Proposal 2: Requirement for registration

A registration process such as the current certificate of approval is required to assess building fitness for purpose and prescribe maximum accommodation numbers.

Proposal: Prescribe the requirement to operate a public building as a public health risk activity that must be registered with the local government enforcement agency.

There is an increased threat to health in public buildings if certain standards of safety and documentation are not met and maintained throughout operation. A process of registration requires that certain standards (based on risk) are met.

Under the current regulations, a certificate of approval is required to open or use a public building. The certificate of approval specifies the purpose for which the building may be used and the maximum occupancy.

The process for issuing this certificate involves an authorised officer assessing plans and conducting an inspection to determine compliance with the Public Buildings Regulations, and is therefore an important mechanism of enforcement.

Part 8 of the Public Health Act provides a framework for the registration of activities declared by the regulations to be public health risk activities. It is proposed that the granting of registration replace the certificate of approval process.

Application and required documents

Any person who wishes to operate a public building can apply for registration and, subject to their willingness to comply with the conditions, have a legitimate expectation that registration will be granted.

Applicants can be required to provide:

- building plans;
- the emergency management plan (for all premises);
- the risk management plan;
- fire engineering reports (if applicable);
- information on Performance Solutions; and
- any other required information for demonstrable safety purposes.

This information is required for authorised officers to make an informed decision when prescribing the building maximum accommodation. At present, the majority of public building applications are not received as standalone applications, but as part of a building permit application.

Review of application by enforcement agency

After reviewing an application for registration, an authorised officer may

- grant the application, with or without conditions, and issue a certificate of registration; or
- request more information; or
- refuse the application and set out the reasons for refusal.

The registration process may involve an inspection of the premises by an authorised officer, at which the applicant is required to be present.

Part of the assessment of registration would involve categorisation as a low, medium or high risk building, using the risk matrix detailed in appendix 1. This would allow the application of scalable conditions and determine the level of management requirements.

Certificate of registration

A certificate of registration can be required to be displayed in a visible location on the premises, and provides evidence to the public that the building is legally registered and approved to operate. This is a similar approach to that used in the management of food industries.

A certificate of registration must specify (section 68(6)) the premises and activity in which the registration is granted and any conditions to which the registration is subject. It is proposed that the certificate include:

- the prescribed use of the building;
- the maximum accommodation permitted for the building;
- any other conditions to which the registration is subject; and
- approved Performance Solutions associated with the building.

Question 12: Is there any additional information you believe should be included on the certificate of registration?

Cost recovery

The Public Health Act provides that a local government may charge a fee for a registration application. In accordance with section 294 of the Public Health Act, this fee must be fixed and recovered under the *Local Government Act 1995* Part 6, Division 5, Subdivision 2.

This means that local government authorities may set a fee for services provided, including receiving an application, granting an approval, making an inspection or issuing a certificate on a cost recovery basis, with this fee scalable based on the determined level of risk of the building as an

indicator of the complexity of the assessment.

Existing occupancy permits

An occupancy permit is required under the Building Regulations, and some aspects may duplicate the public buildings proposed registration process. This has been considered when investigating options; however an occupancy permit cannot serve the dual purpose of certification under the Public Buildings Regulations as:

- the permit does not adequately cover all aspects of public safety, particularly in regards to non-fire related emergencies; and
- it is issued in related to construction, and does not take into account ongoing risk management and operational issues.

Question 13: Do you support the replacement of the certificate of approval process with the certificate of registration process? Please detail the positive and negative impacts on you or your organisation.

7.3 Proposal 3: Requirement for an annual or other fee

At present a certificate of approval is obtained on application and only reviewed if a change needs to be made. To ensure currency of safety systems and documentation an annual fee is proposed.

Proposal: Prescribe an annual or other fee renewal of registration at a pre-determined frequency.

At present, a certificate of approval is required to open or use a public building. Upon application, a certificate is issued and inspections are conducted at a frequency

determined by the local government (may or may not be in accordance with official guidelines) based on risk.

After the certificate of approval is issued there is no legal requirement for updated information or plans to be provided, except where the owner/occupier is proposing a change to the use or occupancy of the building (whether permanent or one off), a renovation is occurring, the premises is sold or the owner/occupier wants to increase the capacity. As such it is possible that evacuation plans, risk management plans etc. could become outdated and no longer meet the current standards.

The Public Health Act provides that the regulations may prescribe an annual fee to be paid in relation to the registration. This annual fee provides an enforcement tool that requires certain standards are maintained, based on risk.

Annual review can therefore be used to ensure that owners/occupiers are maintaining compliance, and face deregistration if not. An annual fee would also be fixed and recovered under the *Local Government Act 1995* and would be set on a cost recovery basis to cover expenses such as administration and inspections.

It is proposed that if **Proposal 2 Requirement for registration** is accepted, an annual or other fee is also adopted in order to recover costs in ensuring that risk plans and other documentation remain up to date.

Frequency of fee payment

Fee payment could occur at a pre-determined frequency between 1 – 5 years, based upon the risk level of the public building. This is the risk level assigned to the building by an authorised officer during

the registration process, in accordance with the DOH risk matrix (appendix 1).

At present a certificate of approval is obtained on application and only reviewed if a change needs to be made. To ensure currency of safety systems and documentation a review process is required.

Figure 4: Proposed fee frequency

Risk level	Fee frequency
High	Annually
Medium	Every 3 years
Low	Every 5 years
Very low	Only in the instance of change

It is not the intention of this proposal to impose onerous requirements on buildings which pose little risk to public health, as such low risk buildings would be required to renew at a much lower frequency.

Ongoing management

Public buildings in WA are currently managed in a proactive rather than reactive manner. Officers do not only concern themselves with a building once an issue has arisen, but manage them on a pre-emptive basis to avoid the occurrence of an incident.

Requiring an annual fee ensures that owners/occupiers are held responsible for maintaining current information, ensuring emergency preparedness. At present ongoing management is also carried out

through inspections, and a fee enables local government to recover their cost for service.

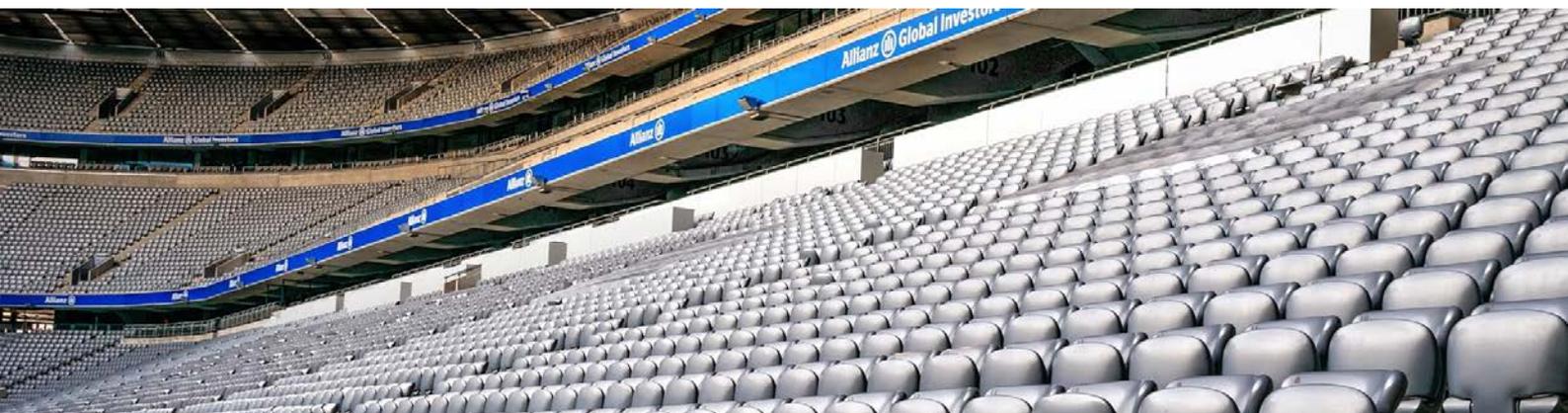
Inspection frequency is not prescribed in the current regulations, however an industry standard for minimum inspections exists, developed and endorsed by the Metropolitan Environmental Health Manager's Group (MEHMG) and the WA Local Government Association (WALGA) in 2014. This schedule sets minimum inspection frequencies for different types of buildings and different risk levels.

Change in use

In addition to the payment of a fee and review of the registration at the prescribed frequency, reassessment of registration could be required with a proposed change in use, structural change/extension or any other occasion that may impact upon the maximum accommodation numbers or venue safety.

This reflects the reality of the evolution of public buildings over time and ensures that all changes are adequately assessed for compliance.

Question 14: Do you support the requirement for an annual or other registration fee? Please detail the positive and negative impacts on you or your organisation.



8 Protecting public safety

8.1 Proposal 4: Amend risk management plan (RMP) requirements

Requirements for RMPs are currently based upon a capacity threshold (1,000 people). This does not accurately reflect the type of public buildings which require risk management planning, as buildings with less than 1,000 people are not necessarily all low risk.

Proposal: Prescribe risk management requirements which reflect a risk-based approach to legislation.

Producing a RMP is an opportunity to identify potential problems before they occur, such that mitigation strategies can be identified and responses planned in advance. A plan should include risk identification, analysis, treatment and evaluation, amongst other information.

Under the current regulations, a RMP is required for all venues expected to accommodate more than 1,000 people without consideration for other aspects of the event, such as building purpose, likely demographic and presence of alcohol. The regulations do not specify the required content of the plan, but do require it to be developed in accordance with AS/NZS ISO 31000:2009. The plan must take all potential public health and safety hazards within the premises into consideration.

It is proposed that owners/occupiers of public buildings be required to develop a RMP based on the level of risk of the public building as outlined in the proposals above. This determination is independent of the RMP process itself, and would be based on a risk matrix developed by the DOH (appendix 1).

It is proposed that RMPs be available to authorised officers on request and that they be reviewed regularly by owner/occupiers.

Scalable requirements

Basing risk management requirements on level of risk rather than a capacity threshold is a more effective way to ensure requirements are scaled appropriately.

The proposed approach is intended to:

- capture low capacity, high risk buildings that may not currently be required to provide RMPs;
- reduce the burden on lower risk operators by reflecting proportional risk management requirements (such as a simple risk register rather than a full plan); and
- provide consistency across local governments.

Development to standard

It is proposed that RMPs continue to be developed in accordance with the current version of Australian/New Zealand Standard ISO 31000. Each public building configuration is unique and so the standard should be adapted as required.

The RMP should be an evolving, practical document, and the onus is upon the owner/occupier to ensure currency and compliance with required standards.

The role of the local government

Some confusion exists around the role of authorised officers in assessing a RMP at present. It is proposed that the role of authorised officers is clarified into the following powers:

- to view a RMP on request;
- to comment on a RMP; and

- to request amendments to be made to a RMP.

Authorised officers would still not be expected to approve the RMP as part of the public building application, however they would be able to comment on it and request amendments based on risk.

The DOH will seek to provide checklists and training to support authorised officers in assessing RMPs.

Question 15: Do you support the requirement to provide a risk management plan based on risk rather than capacity? Please detail the positive and negative impacts on you or your organisation.

Question 16 (for authorised officers): What type of additional assistance would you or your local government require in assessing RMPs? Please detail.

Proposal 5: Improve transparency of Performance Solutions

Under the BCA, Performance Solutions may be used to make modifications that satisfy the BCA but may not comply with safety requirements under the Public Buildings Regulations. They are often poorly documented throughout the application process.

Proposal: Require adequate provision of information on BCA Performance Solutions and ensure these are captured under the conditions of the certificate of registration.

Under the BCA, a Performance Solution is defined as “*any solution that can meet the Performance Requirements, other than a “Deemed-to-Satisfy Solution”*”. They allow flexibility in satisfying the requirements of the Code, and are managed through building surveyors, engineers and/or practitioners.

The justifications and conditions associated with Performance Solutions are not provided

Case study: Lacrosse Building and Grenfell Tower Fires

The Lacrosse building fire in Melbourne (2014) and the Grenfell Tower fire in the United Kingdom (2017) raised a number of concerns in relation to building industry compliance and general fire safety within buildings throughout Australia. Although apartment buildings are not classified as public buildings, the interim Senate report on the implications of the use of non-compliant external cladding materials in Australia (September 2017), highlighted the issues surrounding the use of Performance Solutions under the BCA and the concerns around fire safety systems in buildings in general, including their design, operation, maintenance, testing, and licensing [2].

The Senate report recognised that:

“greater enforcement of existing regulations is needed. However, current building regulations appear inadequate and are too easily evaded, largely due to existing deemed-to-satisfy and performance-based pathways, which provide avenues to circumvent Australian Standards in the NCC” [2].

Additionally, the committee concluded that:

“it is evident from the evidence received that there needs to be a central oversight role independent from industry to provide assurance to the public that structures are built according to the agreed national standards. The committee also endorses the inclusion of mandatory inspections by fire safety engineers and fire authorities to ensure buildings are compliant and public safety is upheld” [2].

to authorised officers when assessing public buildings and associated plans, and often are not required to be provided to local government building surveyors. These may include documents certified by other agencies, such as the Department of Fire and Emergency Services (DFES) and private fire engineers.

The Building Ministers' Forum recently commissioned a report on the compliance and enforcement systems of the building and construction industry. Released in April 2018, the Shergold-Weir report describes the nature and extent of the problems to be "significant and concerning" [26]. The inadequacy of documentation of Performance Solutions is one of many issues recognised.

Discussions with the Public Buildings Working Group indicated that Performance Solutions can be used to justify a reduction in the number of exits, exit widths or travel times to exits, amongst other public health issues. It is critical that these issues continue to be assessed from all risk perspectives including emergencies other than fire.

Transparency and informed decision making

The availability of Performance Solution information is particularly important when issuing maximum accommodation as part of the registration of a public building.

It is preferable that information relating to Performance Solutions is provided with the building permit application, as requesting it later can potentially lead to significant delays in opening. However, it is necessary to work within the scope of the Public Health Act, which cannot request any information to be provided as part of another Act.

Therefore it is proposed that the regulations require that prior to registration, authorised officers must be provided with fire engineering reports and any other report or documentation pertaining to a Performance Solution that has been applied and approved within a public building. Authorised officers may use this information to apply related conditions to the registration of a public building.

This proposal is modelled upon a provision within the ACT *Liquor Act 2010* (Part 5) which allows officers of that Act to request fire engineering studies when determining maximum accommodation numbers for a licensed premises.

Ongoing management requirements

Some Performance Solutions may involve complex interactions between safety systems and management requirements. There is however no requirement in place to report on the maintenance of safety systems or compliance with conditions of Performance Solutions.

It is proposed that authorised officers be provided with the power to ensure compliance with any special requirements relating to building operation that were approved when the building was opened, such as a condition associated with an approved Performance Solution.

Owners/occupiers should be aware of and familiar with a Performance Solution and associated management and maintenance requirements. This proposal will facilitate the inclusion of Performance Solution conditions on the certificate of registration and ongoing compliance by the owner/occupier.

National approaches

In other states there has been a noticeable shift towards increasing transparency and documentation of Performance Solutions. For example, under Queensland's *Building Act 1975*, Performance Solutions must be documented throughout the planning and building process and included on the Certificate of Classification displayed at the entrance of the building. Fire safety management procedures associated with any Performance Solutions must also be included in the evacuation plan.

In addition, South Australia, Victoria and NSW all have varying requirements for provision of information on Performance Solutions to the local government authority.

Other issues

It is recognised that some issues may be beyond the scope of the Public Buildings Regulations, but should be considered.

- Fire engineering reports appear to be the main source of justification for Performance Solutions, and these often do not consider emergencies other than fire.
- Performance Solutions are often use-specific and can limit the flexibility to change and adapt the use of a building. As a result, an application for change of use in a building that has employed Performance Solutions may require extensive modification or be deemed unacceptable for the proposed use.
- There is no class of building practitioners who are registered to address other risks such as access related issues [27].

Question 17: Do you support the requirement to provide Performance Solution information to authorised officers prior to registration? Please detail the positive and negative impacts on you or your organisation.

Question 18 (for authorised officers): Have you faced any challenges in dealing with Performance Solutions? Please detail and provide examples where possible.

Question 19: Are there any other measures you believe could be taken under Health legislation to protect public safety in regards to Performance Solutions?

8.2 Proposal 6: Requirements for temporary structures

The process for approval of temporary structures is highly inconsistent between local governments and in some instances structures are subject to unnecessarily onerous requirements.

Proposal: Prescribe thresholds of approval for temporary structures in new regulations.

The collapse or malfunction of temporary structures such as stages or grandstands has been associated with a number of injuries and deaths globally.

In 2016, two people were left with broken bones after part of a grandstand collapsed at a speedway in Mackay, Queensland.

It is generally recognised that the presence and use of temporary structures may pose a significant risk to public health and safety, particularly:

- if not constructed and erected by a competent person;
- in the event of extreme weather conditions; or

- in the instance of overcrowding or crowd panic which may lead to structural pressure and potential collapse.

Currently, temporary structures such as tents, marquees, tiered seating and enclosures may be required to obtain a Public Building permit under the Health (MP) Act, a building permit, or be signed off by a structural engineer.

It is proposed that baseline thresholds and methods of approval for temporary structures are prescribed in regulation in order to bring consistency to the temporary structures process and certainty to event organisers.

Building Act 2011

The *Building Act 2011* (s69) states that temporary buildings or incidental structures that members of the public normally use, or to which members of the public are permitted access, may require a building permit.

However, Building and Energy have advised that where such buildings are subject to Health provisions and requirements, these processes are adequate to protect public interest and that issuing a building permit is unnecessary duplication.

Inconsistency of management

Currently, there are no prescribed temporary structures under Health legislation however each local government has developed their own processes for their approval.

Many local governments require the approval of temporary structures through the Form 1 application under the Health (MP) Act to “Construct, Extend or Alter a Public Building”.

However, some require an assessment of Building Standards compliance by a building surveyor, or a Certificate of Building Compliance and a Form 2 application under the Health (MP) Act for a certificate of approval.

Example: City of Perth

Temporary structures greater than 20m² must be approved by the City’s Building Unit prior to the commencement of an event.

There are two methods for approval:

1. *Providing drawings to the City’s building surveyor. Upon approval, structures can be signed off by competent persons.*
2. *Supplier builds the structures and provides the City with independent engineer certifications on completion of construction.*

For temporary structures greater than 500m², the City’s Building Unit needs Certificates of Building Compliance or statements of building compliance from registered building surveyors.

Public building assessments are carried out for structures that are enclosed and would be occupied by patrons (such as circus tents).

Many local governments require a statement from the installer that the structure has been installed as per the manufacturer’s specifications, or certification by a structural engineer. These requirements differ markedly between local government areas.

Issues for consideration

A number of issues must be noted when considering a process for temporary structures:

- the growing use of inflatable structures and other emerging types of constructions;
- the certification of structures in regional areas where professionals of certain qualifications may not be present; and
- management of temporary structures after they have been erected and approved, particularly in changing weather conditions.

Prescribed temporary structures requirements

It is proposed that the following general sign-off thresholds are adopted in new regulations to give baseline consistency. They have been developed in consultation with industry and local government officers.

Sign off should state that the structures are suitable to be used for their intended purpose and their use would not adversely affect the safety and health of occupants or users.

Proposed requirements:

Structures up to 9m²: No sign off required.

- Guidelines would outline best practice management, including wind and weighting considerations.

Structures up to 55m²: A competent person/installer is required to sign off.

- It is proposed that if a structure in this range is deemed to be high risk, the authorised officer may require certification by a structural engineer.
- A competent person under the Model Work Health and Safety laws is defined as “a person who has acquired through training, qualification or experience the

knowledge and skills to carry out the task”. It is proposed that this definition is adopted, with further information to be provided in the guidelines.

Structures over 55m²: A structural engineer is required to sign off.

Multiple structures at a large event could be listed on a single sign off by a structural engineer, as is current practice.

If a structure is not in a publicly accessible area, or is only for use by staff, sign off may not be required. Such structures are not of concern to the wider public, and event organisers must ensure compliance with relevant occupational health and safety legislation to protect staff.

Question 20: Do you support the proposed thresholds and levels of qualification for sign off of temporary structures? If no, please detail your preferred alternative.

Guidelines

It is proposed that guidelines would heavily support the requirements for temporary structures, and provide authorised officers with detailed guidance as to when a structure less than 55m² may be classified as high risk.

The guidelines would also include and refer to information in the ABCB Guidelines for Temporary Structures where appropriate.

The DOH would be responsible for developing a guidance policy for structures not prescribed under the regulations.

Question 21: Would prescribing thresholds for the sign off of temporary structures affect you or your organisation? If yes, please describe the impacts.

9 Removing red tape

9.1 Proposal 7: Repeal electrical requirements from the Public Buildings Regulations

Electrical requirements within the Public Buildings Regulations are a duplication of other legislation effectively administered by more appropriate agencies. Authorised officers are not trained or qualified to assess the safety of electrical installations.

Proposal: Repeal electrical requirements with no replacement.

Under the Public Buildings Regulations (Regulation 10), owners/occupiers are required to provide certification of electrical work through a Form 5.

This form must be signed off by a licensed electrical contractor or electrical worker and certifies that electrical work is compliant with the Public Buildings Regulations, Building Regulations and the *Electricity (Licensing) Regulations 1991*.

Since 1992 the provisions concerning electrical work have been significantly amended and updated and are now considered to be adequately covered under the *Electricity (Licensing) Regulations 1991*.

In order to reduce duplication, it is proposed that the requirement for a Form 5 be repealed. This would be enacted through the removal of Regulation 10 from the Public Buildings Regulations which states that a certificate of approval shall not be issued unless a person authorised under the *Electrical (Licensing) Regulations 1991* has issued a Form 5 certifying the electrical work.

Legislation under Building and Energy

The *Electricity (Licensing) Regulations 1991* are administered by Building and Energy within the Department of Mines, Industry Regulation and Safety.

As an agency, Building and Energy are responsible for ensuring the safety of consumers' electrical installations and appliances through administering technical and safety legislation relating to electricity. This includes the licensing of electrical workers and electrical contractors and enforcing prescribed technical standards.

Following electrical installation work by a licensed electrical contractor, a notice of completion (in the form of an electrical safety certificate) must be provided to the customer within 28 days of completing the work. This certificate guarantees that the work has been carried out by a licensed electrical contractor, is safe and complies with the relevant safety standards.

Duplication of other requirements

Under the Building Act and Regulations, the owner/occupier will make an application to the local government building surveyor for an occupancy permit. A notice of completion (in the form of an electrical safety certificate) is required to be provided as part of this application. It is unnecessary that this duplicate requirement also be retained under the Public Buildings Regulations, as the document is already being provided to local government.

Courses of action for authorised officers

Authorised officers are not considered to be adequately trained or qualified to assess electrical installations themselves. If there is a suspected public health risk from an electrical installation in a public building,

officers should report this to the appropriate agency (Building and Energy).

It is also noted that in any circumstances where the electrical installation is a cause for concern, authorised officers would retain the power to issue a notice of improvement under the general public health duty.

Question 22: Do you support the proposal to repeal the requirement for a Form 5 (electrical safety certification)? Please detail the positive and negative impacts on you or your organisation.

9.2 Proposal 8: Repeal requirements adopted into the BCA 2019

A number of provisions under the Public Buildings Regulations have now been moved into the BCA, and need to be repealed to avoid duplication.

Proposal: Repeal requirements which have been adopted by the BCA, and reword any provisions which will carry over.

In 2018 Building and Energy and the Department of Health have negotiated to move a number of construction requirements from the Public Buildings Regulations into the BCA 2019. These provisions will appear as a WA amendment, and as such it is proposed that they are repealed from the Public Buildings Regulations without replacement.

Regulation 11 (1) and (2): Requirements for seats and aisles

Regulation 11 (1) and (2) contain requirements for the securing and fixing of seats, and requirements for aisles.

The BCA amendment WA H101.6 contains provision for fixed seating to have aisles on both sides of a row of 10 or more seats and

for the number of seats in a row between aisles to not exceed 42.

Non-permanent seating is not addressed by the BCA. It is proposed that new public buildings regulations would exclude permanent seating which will be included in the BCA but include the requirement for temporary seats to be fastened together in sets of 4 or more as is the current requirement.

Regulation 13 (2): Steps and landings (handrails)

Regulation 13 (2) contains requirements for hand rails on steps and landings. It is proposed this provision be repealed.

The proposed BCA amendment WA H101.4 requires that hand rails be provided on each side of stairways, landings or ramps (except for steps in a fire-isolated stairway).

Regulation 13 (3): Steps and landings (treads and risers)

Regulation 13 (3) contains prescribed heights of treads and risers. It is proposed this provision be repealed.

The proposed BCA amendment WA H101.3 states that steps must have risers not exceeding 180mm and goings not less than 280mm (except for steps in a fire-isolated stairway or fire-isolated ramp).

Regulation 14 (5): Exit requirements

Regulation 14 (5) contains a requirement for more than one exit in buildings accommodating 50 or more people. It is proposed that this provision be repealed.

The proposed BCA amendment WA H101.2 states that WA public assembly buildings that accommodate more than 50 persons must have more than one exit.

The DOH has been working with Building and Energy on this issue, and recognises that Performance Solutions may be used to vary this requirement. Building and Energy has agreed to continue to monitor this issue through their building application audits to ensure that appropriate exits are being designed for emergencies of all kinds.

Regulation 16 (5): Lighting of egress and Regulation 31 External lighting

Regulation 16 (5) contains a requirement for lighting of external egress and thoroughfare paths, and Regulation 31 contains requirements for levels of external lighting. It is proposed that these provisions be repealed.

The proposed BCA amendment WA H101.5 states that the external path of travel to the road or open space associated with an exit of a WA public assembly building must be provided with a minimum illuminance of 1 lux at ground level (equal to the current requirements). It also states that:

- external lighting systems are to be connected to a separate circuit from general or emergency lighting;
- in the instance of 2 or more lights, they must be connected over at least 2 circuits so that one section can remain illuminated if one fails; and
- switches controlling external lighting must be inaccessible to the public.

Question 23: Do you support the proposal to repeal the requirements which duplicate the BCA? Please detail the positive and negative impacts on you or your organisation.

9.3 Proposal 9: Repeal various other requirements

A number of requirements are now outdated or considered covered by other legislation or Australian Standards.

Proposal: Exclude outdated, irrelevant and duplicate requirements from proposed new regulations.

It is proposed that the following topics, currently regulated under the Public Buildings Regulations, be excluded from proposed new regulation for the reasons discussed. They may be effectively covered under the Australian Standards, the BCA or otherwise are no longer relevant.

Regulation 14 (1,2,3,4): Exit doors

Regulation 14 (1,2,3,4) describes requirements for exit doors including direction, sliding door approvals, requirements for locks and fittings and prohibition of barrel bolts.

It is proposed that these provisions be repealed and replaced with the requirement for all exit doors and locking devices to comply with the BCA, for the following reasons:

- The BCA is the appropriate legislation to contain exit door requirements. It contains detailed regulations for exit and fire doors which comprehensively cover safety requirements and exclusions. Meeting the BCA requirements reflects the agreement that in addition to barrel bolts, there are many kinds of unsuitable locking mechanisms which should be prohibited.
- This action would allow authorised officers to continue to inspect locking doors and exit requirements and enforce compliance, as locking

devices may be altered following construction of a building.

Some authorised officers have raised concerns over the use of magnetic locking devices and their suitability in emergencies other than fire. Building and Energy have stated that as per the BCA such systems must be capable of manual deactivation in addition to deactivation upon alarm.

Regulation 16 (1): Exit signs

Regulation 16 (1) states that exit signs must conform to AS/NZS 2293.

The BCA and Building Regulations have extensive requirements for exit signs. As part of the move of construction requirements to the BCA, it is proposed that this regulation is repealed and replaced with the requirement for exit signs to conform to the BCA.

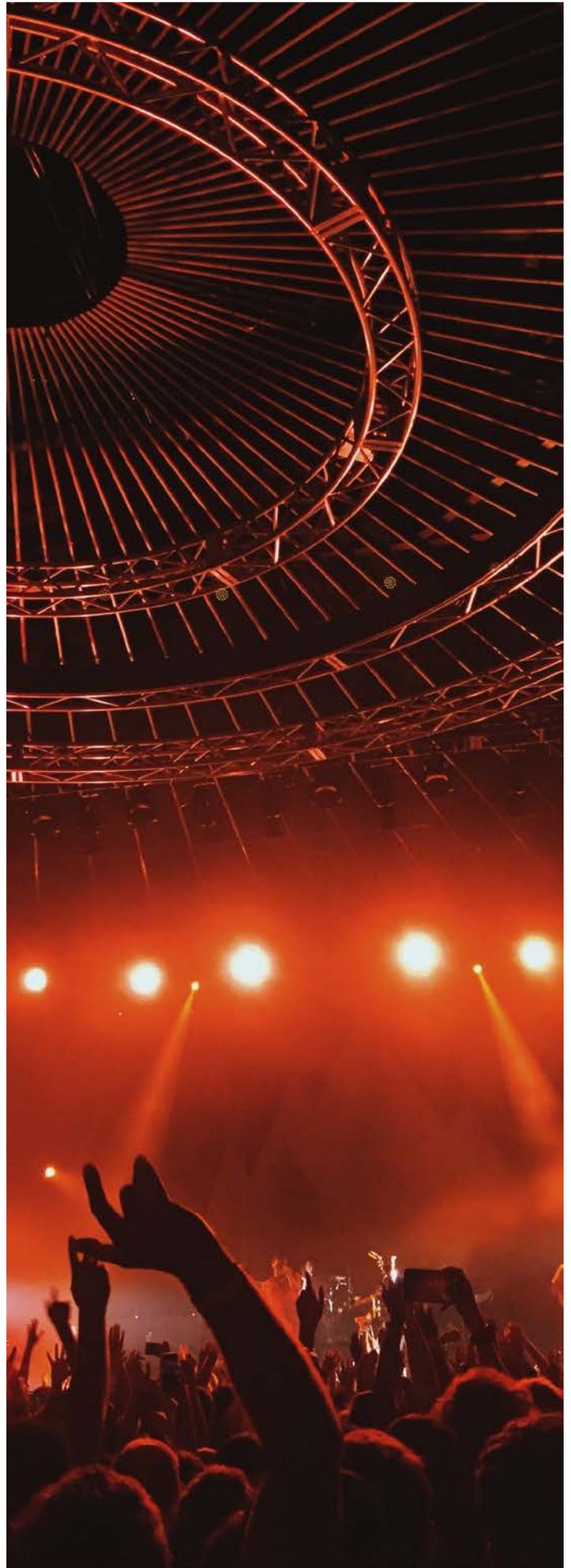
Regulation 18: Electric fans and Regulation 19: Heaters

Regulation 18 sets height and guard requirements for electric and ceiling fans and Regulation 19 sets requirements for temperature protection and location of heaters. It is proposed that these provisions be repealed.

It is considered unnecessarily prescriptive to include fan and heater requirements in the proposed new regulations, and it is proposed that their safety is captured under the general maintenance provision, with additional information provided in the accompanying guidelines, including reference to applicable Australian Standards.

Regulation 20 (5,6): Minimum illuminance for sanitary facilities

Regulation 20 (5) and (6) set the minimum illuminance for sanitary facilities. It is



proposed that these provisions are repealed.

The BCA sets requirements for illumination and lighting, including FP4.2 which states that artificial lighting must be installed to provide a level of illuminance appropriate to the function or use of the building to enable safe movement by occupants. This is considered sufficient from a risk perspective, and the general public health duty can be used if an unsafe lighting situation arises.

It is the Department's understanding that any temporary toilets that are used in a public building as part of the required number of toilets for that building must meet the BCA standards for permanent toilets. As such, there is no need for an additional regulation for illuminance of temporary toilets.

Regulation 25: Fire and smoke control devices

Regulation 25 requires that the owner/occupier ensure that all appliances necessary for the prevention or extinguishment of fires are maintained. It is proposed that this provision is repealed.

Under the proposed new regulations, there will be a general maintenance provision, requiring that all equipment be maintained in efficient working order. This will extend to all fire alarms, hydrants, fixed-line telephones and other fittings necessary for fire control and prevention. An additional provision would be a duplication of this.

AS 1851 'Routine service of fire protection systems and equipment' covers fire safety maintenance, and if considered appropriate may be adopted under the proposed regulations.

Regulation 27: Artificial lighting and Regulation 28: General lighting

Regulation 27 requires that artificial lighting for a public building be provided by electric lighting and regulation 28 requires that a general lighting system be provided and prescribes illumination levels. It is proposed that these provisions be repealed.

The BCA covers artificial lighting requirements in detail in section FP4.2, and general lighting requirements in F4.4. Such construction requirements are more appropriately contained within the BCA. The general public health duty can also be used if lighting is deemed to pose a safety hazard.

Regulation 29: Position of luminaires

Regulation 29 prescribes installation requirements for luminaires. It is proposed that this provision be repealed.

It is considered unnecessarily prescriptive to include these requirements in the proposed new regulations, and it is proposed that safety of luminaires is captured under the general maintenance provision. Additional information may be provided in the accompanying guidelines, including reference to applicable Australian Standards such as AS/NZS 60598.1 Luminaires general requirements and tests.

Regulation 32 (1-3): Emergency lighting

Regulation 32 requires that fail-safe emergency lighting be provided and maintained in accordance with the Building Regulations and AS/NZS 2293. It is proposed that this provision is repealed.

The BCA covers requirements for emergency lighting, including under E4.4 which states that emergency lighting systems must comply with AS 2293.1.

The maintenance of effective emergency lighting would also be required under the general maintenance provision.

Regulation 39 (1-4): Safety lighting

Regulation 39 provides requirements for safety lighting. It is proposed that these provisions are repealed, and replaced with provisions for photo-luminescent lighting as well as information in the guidelines.

Provisions may include requirement for:

- a management plan to ensure that all strips are fully charged at the start of each event, including those indoors and in stairwells;
- maintenance of the material in a clean condition to facilitate charging;
- a site determination; or
- events to not exceed the manufacturer's designated lighting discharge period.

Lighting must provide a level of illuminance appropriate to the function or use of the building to enable safe movement by occupants under the BCA.

Regulation 41: Emergency lighting

Regulation 41 states that an emergency lighting system shall be provided except where approved by the Chief Health Officer. It is proposed that this provision be repealed.

This provision will no longer be necessary if Regulation 32 providing for emergency lighting is also repealed. The BCA is the appropriate legislation to manage emergency lighting in public buildings.

Question 24: Do you support the proposal to repeal the regulations listed in **Proposal 9**? Please detail the positive and negative impacts on you or your organisation.

10 How will the changes affect me?

The intent of this discussion paper is to outline and seek feedback on proposed changes to the Public Buildings Regulations.

The results of this consultation will inform the development of the reforms and as such this section cannot catalogue effects in detail. It is intended only to give a broad overview of possible impacts, which will be discussed further once proposals are finalised.

10.1 Owners and occupiers

The majority of the responsibilities of owners/occupiers of public buildings will remain the same, including applying for appropriate approvals, attending inspections, developing plans, maintaining fire safety systems and log books and ensuring exits are unobstructed.

Owners/occupiers will benefit from a degree of consistency of requirements across local government areas with the introduction of a standardised risk matrix. All will also benefit from the repeal of outdated and duplicate legislation and associated red tape, including the removal of the requirement to provide an electrical notice of completion (Form 5).

Owners may find that their building will be managed more efficiently, as it will be classified into a risk category corresponding with an appropriate level of regulatory requirements.

There will be changes to the amount of information that owners/occupiers will be required to provide, including information on Performance Solutions and the more

frequent provision of updated documents through the renewal process.

Owners/operators will be responsible for an extra fee for renewal. Some operators may experience a decrease in fees and regulations if their building is excluded or found to be a lower class of risk, while some may experience an increase if not currently captured under the Public Buildings Regulations.

10.2 Public building users

According to local government optional reporting data gathered by the DOH, very few complaints and enquiries are currently received from the general public regarding public buildings in WA. Those that are received are likely to be related to noise or food handling, aspects which are addressed under different legislation.

It is expected that there would continue to be very few impacts on patrons of public buildings.

Users could expect to have increased confidence that stringent and consistent standards of safety are being upheld.

There is the potential for reduced or increased costs when interacting with public buildings (such as ticketing, goods/services or rental costs) as owners/occupiers may pass on savings or costs associated with changes in regulatory requirements.

10.3 Local government

It is likely that local government as the enforcement agency, and in particular authorised officers, would be most heavily impacted by the proposed changes.

Preliminary discussion with authorised officers has informed the development of the proposals, and it is expected that local government would widely benefit from the proposed changes to make the legislation more workable.

Many of the responsibilities of authorised officers would remain the same, including processing applications for registration, determining maximum accommodation, performing inspections and approving emergency, evacuation or other plans.

Authorised officers will no longer be required to assess plans for construction compliance. This change will occur regardless of the outcome of this discussion paper as construction requirements will be included in the 2019 BCA as a WA amendment, and so will be assessed by building surveyors in future.

There would be an increase in consistency across local government areas, improving capacity and transfer of skill. Through registration and renewal there would also be an opportunity for cost recovery.

Expected changes may include:

- Reduction or increase in workload as a number of buildings are included or excluded based on the new definition.
- Increase in workload as the Crown becomes bound under the new Act, including a number of buildings not previously captured.
- Reduction in regulatory burden as documentation and inspection requirements are more accurately matched to levels of risk.
- Reduction in burden of administering duplicate and outdated requirements.
-



- Better provision of information on Performance Solutions when assessing public building applications.

Introduced powers for officers include the power to:

- view an RMP on request;
- request amendments to be made to an RMP; and
- ensure compliance with Performance Solutions and any other special operational conditions.

10.4 State government

It is anticipated that proposed changes would have minor impacts on state government.

The DOH would continue to regulate Rottneest Island and Kings Park. As the centre for expertise on large projects, the DOH will remain responsible for large projects on Crown land.

As the system manager, the DOH would also be responsible for issuing guidelines and providing advice on implementation of the new regulations. The DOH would assist local governments where required.

The Building and Energy division would not be impacted by the proposed changes. It is anticipated that Building and Energy and DOH would continue to work together to form a strong relationship between building and health throughout the state.

Question 25: Do you believe there would be any additional impacts on any stakeholder group that are not listed in section 10 of the paper, or that you have not detailed in your previous answers?

Question 26: Do you have any further suggestions on ways to improve the consistency of public building regulation across local government areas, or any further comments?

11 Appendix 1 – Proposed risk matrix

This matrix has been developed based on the Public Health Event Risk Classification Tool from the *Guidelines for concerts, events and organised gatherings*, and the City of Rockingham Public Building Risk Classification system.

The proposed matrix will determine the level of risk of each building and therefore the management requirements. Your comments about the matrix, particularly using your own examples, are encouraged.

Risk factor	Applied weighting	Score
Building capacity		
1000+	20	
500 – 1000	15	
200 – 500	5	
100 – 200	2	
50 – 100	1	

Entry restrictions		
Open to general public; free, prior numbers not known, or general admission	4	
Function for selected membership; not related persons; pre-sold tickets and allocated seating	2	
Private function	1	

Crowd dynamics		
Elderly, mobility impaired, or require assistance and close supervision	4	
Young children require close supervision	2	
Healthy, predominantly good mobility	0	

Operating times (lighting)		
Lighting dimmed or extinguished	10	
Normal lighting	2	
Daylight hours (open air or building with windows)	1	

Egress difficulty		
Multi storey building or basement with only stair access	10	
2 storey building	6	
Complex single storey building – multiple areas	4	
Simple single storey building – one area	1	
Open air	0	

Risk factor	Applied weighting
-------------	-------------------

Type of use	
Entertainment with amplified music	10
High risk activities – crowd interaction	2
Medium risk activities	1
Low risk activities	0
	Score
	<input style="width: 100px;" type="text"/>

Score:

Drugs & alcohol multiplier (multiply the above total)	
BYO Alcohol	x2
Alcohol is sold or provided	x2
Illicit drug use is likely	x2
Alcohol banned or traditionally consumed in moderation	x1
	Score
	<input style="width: 100px;" type="text"/>
	Total score:
	<input style="width: 100px;" type="text"/>

RISK RATING:

Risk rating	Score
Low risk	0 - 11
Medium risk	11 - 50
High risk	50 - 100

Question 27: Do you support the use of the matrix in Appendix 1 to assess public buildings? Please detail the positive and negative impacts on you or your organisation.

Question 28: Can you think of any examples of areas where this matrix may fail to classify buildings accurately? Please detail.

12 Appendix 2 – Regulatory tools under the *Public Health Act 2016*

Once fully implemented, the *Public Health Act 2016* has a number of mechanisms to deal with public health risk management and offences under the Act. These include:

- General public health duty
- Infringement notices
- Improvement notices and enforcement orders
- Prosecution; and
- Registration and licensing.

General public health duty

The general public health duty requires that a person must take all reasonable and practicable steps to prevent or minimise any harm to public health that might foreseeably result from anything done or omitted to be done by the person.

Where the general duty is to be applied, there must be some clear *harm* (or foreseeable harm) to public health. In cases where matters are a nuisance or amenity problem but no health effect can be proven, such as unsightly yards, neighbourhood disputes and inconveniences, the general duty will not apply.

Non-compliance with the general duty is not an offence in itself, but may lead to the application of improvement notices and enforcement orders under Part 14 of the Public Health Act. Guidelines may be used to clarify the application of the general public health duty and provide guidance as to the measures that may constitute compliance or non-compliance with the general duty.

Infringement notices

An infringement notice is a written notice that a person has allegedly committed a specified offence which requires the payment of a fine within a specified time or the election to have the matter heard in court. Infringement notices provide a cost effective and efficient method of dealing with some offences.

The Public Health Act is silent on the ability to issue infringement notices. However, as it is a prescribed Act under the *Criminal Procedures Act 2004*, it enables the making of regulations that prescribe offences for which an infringement notice can be issued.

Infringement notices can only be issued where prescribed by a regulation or local law.

Improvement notices and enforcement orders

An improvement notice is an order that either requires or prohibits a person from taking specified action. There may be a specified period in which the person has to comply with the improvement notice. While an authorised officer may extend the period given to take action, once that period has elapsed an authorised officer may:

- Issue a notice of compliance if the officer is satisfied, after carrying out an appropriate assessment that the improvement notice has been complied with.
- Issue a notice that sets out the reasons why the officer is not satisfied that the improvement notice has been complied with; and
- Report the non-compliance to the enforcement agency with a recommendation to issue an enforcement order.

An enforcement order is an order that either requires or prohibits a person from taking specified action. A prohibition with respect to specified action may be limited, absolute or conditional.

An enforcement order can be issued by an enforcement agency if it reasonably believes that an improvement notice has not been complied with, or if the issue of the order is necessary to prevent or mitigate a serious public health risk. An enforcement agency may issue an enforcement order in respect of non-compliance with an improvement notice irrespective of whether the improvement notice was issued by a person who was an authorised officer of that or another enforcement agency.

Prosecution

In accordance with Part 18, section 280 of the Public Health Act, an enforcement agency may commence proceedings for an offence under the Act or its regulations. A prosecution is separate from action under Part 14 relating to improvement notices and enforcement orders. So prosecution can be commenced irrespective of any action being undertaken under that part.

Registration and licensing

Part 8 of the Public Health Act provides a framework for the registration and/or licensing of activities declared by the regulations to be public health risk activities. The regulations will prescribe who the appropriate enforcement agency is for each registrable and/or licensable activity. This may be the local government, the Chief Health Officer or both. Regulations may prescribe offences in relation to an activity and provide modified penalties for which an infringement notice may be issued.

13 Appendix 3 – Risk assessment methodology

Please note: Appendix 3 is relevant only to the internal risk assessment on pages 12-14 of this document. The following tools are not intended for use by authorised officers or applicants and there is no suggestion that these tools should be used to determine the risk level of a public building.

A number of risk assessment tools need to be used to determine the risk level for each identified public health risk. These tools include a health consequences table (table 2), a risk likelihood table (table 3), and a risk qualitative matrix (table 4).

These risk assessment tools are from AS/NZS ISO 31000:2009 Risk Management – Principles and guidelines [28] and the Health Risk Assessment (Scoping) Guidelines [29].

The DOH has five public health risk levels (table 1), each requiring a varying degree of DOH involvement in their management.

Table 1 Definition of risk levels

Risk Level	DOH management requirements
Very Low Public Health Risk	No further assessment required
Low Public Health Risk	Some mitigation/management may be required – no detailed assessment of health hazards required but addressed with routine controls
Moderate/Medium Public Health Risk	Substantial mitigation/management required – assessment required of health hazards
High Public Health Risk	Not an acceptable risk. The DOH needs to be involved in the management of high public health risks.

Risk Level	DOH management requirements
	Major mitigation/management (including offsets) may be required – assessment required of health hazards
Extreme Public Health Risk	Potentially unacceptable: modification of proposal required

Table 2 Health consequences table adapted from 2011 Health Risk Assessment (Scoping) Guidelines, DOH

Category	Acute health consequences (per hazard or outbreak)	Chronic health consequences (per project lifecycle)
1 Catastrophic	<ul style="list-style-type: none"> • >1 fatality • OR >5 permanent disabilities • OR Non-permanent injuries requiring hospitalisation for 5 – 10 % of populations at risk • OR Acute health effect requiring hospitalisation for 5 – 10 % of populations at risk 	Chronic health effect requiring medical treatment for 10 – 15 % of population at risk
2 Massive	<ul style="list-style-type: none"> • 1 fatality • OR 2 – 5 permanent disabilities • OR Non-permanent injuries requiring hospitalisation for 2 - 5 % of populations at risk • OR Acute health effect requiring hospitalisation for 2 – 5 % of populations at risk 	Chronic health effect requiring medical treatment for 5 - 10 % of population at risk
3 Major	<ul style="list-style-type: none"> • No fatality • AND 1 permanent disability • OR Non-permanent injuries requiring hospitalisation for 1 – 2 % of populations at risk • OR Acute health effect requiring hospitalisation for 1 - 2 % of populations at risk • OR Evacuation is necessary 	Chronic health effect requiring medical treatment for 2 - 5 % of population at risk
4 Moderate/ Significant	<ul style="list-style-type: none"> • No fatality • AND No permanent disability • AND Non-permanent injuries requiring hospitalisation for 1 – 2 % of populations at risk • OR Acute health effect requiring hospitalisation for 1 – 2 % of populations at risk • AND No evacuation 	Chronic health effect requiring medical treatment for 1 - 2 % of population at risk
5 Minor	<ul style="list-style-type: none"> • No fatality • AND No permanent disability • AND Non-permanent injuries requiring hospitalisation for 1 – 5 persons • OR No Acute health effect requiring hospitalisation • AND No evacuation 	Chronic health effect requiring medical treatment for 0 - 1 % of population at risk

Category	Acute health consequences (per hazard or outbreak)	Chronic health consequences (per project lifecycle)
6 Negligible/ Slight	<ul style="list-style-type: none"> No fatality AND No permanent disability AND No Non-permanent injuries requiring hospitalisation AND No Acute health effect requiring hospitalisation AND No evacuation 	No chronic health effect requiring medical treatment

Table 3 Risk likelihood table adopted from 2011 Health Risk Assessment (Scoping) Guidelines, DOH

Likelihood	Expected or Actual Frequency	% Chance of chronic health effect during life of project
Almost Certain	More than once a year	Over 90%
Likely	Once in 1 to 3 years	61 – 90%
Possible/ Occasionally	Once in 3 – 5 years	31 – 60%
Unlikely	Once in 5 – 10 years	6 – 30%
Rare/Remote	Once in more than 10 years	Up to 5%

Table 4 Risk matrix (qualitative)

Likelihood	Consequences					
	Slight/ Negligible	Minor	Moderate	Major	Massive	Catastrophic
Almost certain	Low	Medium	High	Extreme	Extreme	Extreme
Likely	Low	Low	Medium	High	Extreme	Extreme
Possible	Very Low	Low	Low	Medium	High	Extreme
Unlikely	Very Low	Very Low	Low	Low	Medium	High
Rare/ Remote	Very Low	Very Low	Very Low	Low	Low	Medium

14 Appendix 4 - Question list

The following is a master list of all questions contained in this discussion paper. You are encouraged to respond to these questions through the online survey, which can be accessed using the link on page 6 of this document.

Question 1: Do you support the adoption of **Option A: Repeal without replacement**? Why or why not?

Question 2: Can you identify any further advantages or disadvantages of **Option A**?

Question 3: Do you support the adoption of **Option B: Provide new, updated regulations**? Why or why not?

Question 4: Can you identify any further advantages or disadvantages of **Option B**?

Question 5: Do you have any suggestions for alternative options that have not been considered? Please explain your ideas by providing examples of complaints, case studies, data or other evidence.

Question 6: Do you believe any of the current public building types should be excluded from regulation? Please explain your reasoning.

Question 7: Do you believe that excluding buildings with a total capacity of less than 50 people would have any adverse impacts on public health? Please provide specific examples.

Question 8: Do you support the exclusion of buildings under 'Proposed exclusions' (page 23)? Please detail the positive and negative impacts on you or your organisation.

Question 9: Do you believe that any of the 'Buildings for consideration' (page 24) should be regulated as public buildings? Please explain your reasoning.

Question 10: Overall, do you support the proposed changes to the definition of a public building in section 8.1? Please detail the positive and negative impacts on you or your organisation.

Question 11: Can you identify any situations where comparable regulations exist in similar buildings (that are not public buildings)? The purpose of this question is to identify any potential duplication.

Question 12: Is there any information additional to the points on page 27 that you believe should be included on the certificate of registration?

Question 13: Do you support the replacement of the certificate of approval process with the certificate of registration process? Please detail the positive and negative impacts on you or your organisation.

Question 14: Do you support the requirement for an annual or other registration fee? Please detail the positive and negative impacts on you or your organisation.

Question 15: Do you support the requirement to provide a risk management plan based on risk rather than capacity? Please detail the positive and negative impacts on you or your organisation.

Question 16 (for authorised officers): What type of additional assistance would you or your local government require in assessing RMPs? Please detail.

Question 17: Do you support the requirement to provide Performance Solution information to authorised officers prior to registration? Please detail the positive and negative impacts on you or your organisation.

Question 18 (for authorised officers): Have you faced any challenges in dealing with Performance Solutions? Please detail and provide examples where possible.

Question 19: Are there any other measures you believe could be taken under Health legislation to protect public safety in regards to Performance Solutions?

Question 20: Do you support the proposed thresholds and levels of qualification for sign off of temporary structures? If no, please detail your preferred alternative.

Question 21: Would prescribing thresholds for the sign off of temporary structures affect you or your organisation? If yes, please describe the impacts.

Question 22: Do you support the proposal to repeal the requirement for a Form 5 (electrical safety certification)? Please detail the positive and negative impacts on you or your organisation.

Question 23: Do you support the proposal to repeal the requirements which duplicate the BCA? Please detail the positive and negative impacts on you or your organisation.

Question 24: Do you support the proposal to repeal the regulations listed in **Proposal 9**? Please detail the positive and negative impacts on you or your organisation.

Question 25: Do you believe there would be any additional impacts on any stakeholder group that are not listed in section 10 of the paper (page 41-43), or that you have not detailed in your previous answers?

Question 26: Do you have any further suggestions on ways to improve the consistency of public building regulation across local government areas, or any further comments?

Question 27: Do you support the use of the matrix in Appendix 1 to assess public buildings? Please detail the positive and negative impacts on you or your organisation.

Question 28: Can you think of any examples of areas where this matrix may fail to classify buildings accurately? Please detail.

15 References

1. Grosshandler, W.B., N Madrzykowski, D and K. Kuntz, *Report of the Technical Investigation of The Station Nightclub Fire*, in *National Institute of Standards and Technology NCST Act Report (NCSTAR) 2*. 2005. p. 246.
2. The Senate Economics References Committee, *Non-conforming building products Interim report: aluminium composite cladding*. 2017.
3. United States District Court, *Passa v Derderian*. 2004.
4. Office of Best Practice Regulation, *Best Practice Regulation Guidance Note: Value of a statistical life*, D.o.P.M.a. Cabinet, Editor. 2014.
5. Hendrie, D., et al., *Incidence and costs of injury in Western Australia 2012*. 2012.
6. Seligson, S., *Damages*, in *Bostonia*. 2013.
7. Australian Bureau of Statistics, *4114.0 Attendance at Selected Cultural Venues and Events, Australia 2013 - 14*. 2014.
8. Patrikios, A. *What is the Whisky Au Go Go firebombing?* [Website] 2017; Available from: <http://www.news.com.au/national/breaking-news/what-is-the-whiskey-au-go-go-firebombing/news-story/713729e9e179278e12c19c8da665d248>.
9. Coffey, P. *Report of the independent examination of the Stardust Victims Committee's case for a reopened inquiry into the Stardust fire disaster*. 2009.
10. Popplewell, J., *Committee of Inquiry into Crowd Safety and Control at Sports Grounds, Interim Report 1985*.
11. Berger, J. *The crush at City College; an inquiry spreads blame for deaths at a New York gym*. 1992.
12. Venkatesan, V., *Tragic Errors*, in *Frontline*. 2007: New Delhi.
13. Peachey, P. *Teenagers killed in Bulgarian nightclub stampede*. 2001.
14. *People ex rel. City of Chicago v. Le Mirage, Inc.* 2011, Illinois Appellate Court.
15. Tidwell, J. *The Station Nightclub Fire: Revisiting the Lessons*. 2012; Available from: <http://www.fireengineering.com/articles/print/volume-165/issue-1/features/station-nightclub-fire-revisiting-lessons-full.html>.
16. Aunion, J., *Promoter behind Madrid Arena tragedy given four-year jail sentence*. 2016.
17. Darlington, S., and C. Carter, . *Brazil nightclub fire: 'Like a war zone' with bodies piled*. [website] 2013; Available from: <http://edition.cnn.com/2013/01/28/world/americas/brazil-nightclub-fire/index.html>.

18. Velin, B. *Crowd incident at Mayweather fight was 'wild scene'*. [Website] 2014; Available from: <https://www.usatoday.com/story/sports/boxing/2014/05/04/floyd-mayweather-marcos-maidana-stampede/8700763/>.
19. Oakland Fire Department, *Origin and Cause Report: Incident # 2016-085231*. 2017.
20. Baker, K. *Concert goers slam lax security Ariana Grande show*. 2017; Available from: <http://www.dailymail.co.uk/news/article-4533248/Concert-goers-slam-lax-security-Ariana-Grande-show.html>.
21. Green, B.L. and J.D. Lindy, *Post-Traumatic Stress Disorder in Victims of Disasters*. Psychiatric Clinics of North America, 1994. **17**(2).
22. Challenger, R. and C. Clegg, *Crowd disasters: a socio-technical systems perspective*. Contemporary Social Science, 2011. **6**(3): p. 343-360.
23. Coroner's Court of Western Australia, *Office of the State Coroner Annual Report 2001/2002*. 2002.
24. Ceranic, I. *Man dies in balcony fall at Fremantle's Sail and Anchor pub* 2017; Available from: <http://www.abc.net.au/news/2017-07-16/man-dead-after-falling-from-sail-and-anchor-balcony/8712768>.
25. SKIP Consulting Pty Ltd, *Report comparing a Class 6 hotel bar area against a Class 9b bar area with live music or a dance floor*. 2015.
26. Shergold, P.W., B, *Building Confidence: Improving effectiveness of compliance and enforcement systems for the building and construction industry across Australia*. 2018.
27. Wilson, L. *Preparation of performance solutions (alternative solutions)* 2015; Available from: <https://accesspeerreviews.com.au/performance-based-building-codes/preparation-of-alternative-solutions/>.
28. Standards Australia, *AS/NZS ISO 31000:2009 Risk management - Principles and guidelines*. 2009, Standards Australia/Standards New Zealand.
29. Government of Western Australia, *Health Risk Assessment (Scoping) Guidelines*, Department of Health, Editor. 2010: Perth, Western Australia.

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