

Baseline Report

Emergency Management Maturity Framework

City of Sydney and Better Buildings Partnership (BBP)

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1 Glossary

Acronym	Meaning
AIDR	Australian Institute for Disaster Resilience
AS	Australian Standard
BBP	Better Buildings Partnership
BIA	Business Impact Analysis
CBD	Central Business District
CPG 101	Comprehensive Preparedness Guide 101
CCTV	Closed-Circuit Television
ECO	Emergency Control Organisation
EPC	Emergency Planning Committee
ESG	Environmental, Social and Governance
FEMA	Federal Emergency Management Agency (United States)
FRNSW	Fire & Rescue NSW
GRESB	Global Real Estate Sustainability Benchmark
HVM	Hostile Vehicle Mitigation
IED	Improvised Explosive Device
ISO	International Organisation for Standardisation
NEMA	National Emergency Management Agency (Australia)
NSW	New South Wales
PA	Public Address (system)
SES	State Emergency Service
WELL	WELL Building Standard (WELL v2 referenced)

3 Executive Summary

This Baseline Report brings together the research and evidence that will inform development of the Better Buildings Partnership (BBP) Emergency Management Maturity Framework and Toolkit. It draws on the Sydney CBD Safety Sub Plan, Australian and international emergency management standards including Australian Standard (AS) 3745, International Standard (ISO) 22301, ISO 31000, Australian Institute for Disaster Resilience (AIDR) guidance and the United States Federal Emergency Management Agency (FEMA) Comprehensive Preparedness Guide 101, as well as globally recognised Environment, Social and Governance (ESG) and resilience frameworks such as WELL, Green Star and GRESB. National guidance from the National Emergency Management Agency (NEMA) and broader climate risk considerations have also been used to understand how emerging hazards reshaping expectations for commercial buildings are.

To complement this standards and policy review, the project examined a set of contemporary major incident case studies, including the 2024 Bondi Junction attack, the 2017 Bourke Street incident, the 2014 Lindt Café siege, the 2017 Manchester Arena bombing, and a series of severe storm events affecting Western Sydney in 2021–2022 that resulted in flash flooding across Parramatta. These case studies do not relate to BBP member performance; rather, they provide valuable sector learnings on communication under pressure, situational awareness, lockdown versus evacuation decision-making, control-room and system readiness, and coordination across tenants, neighbouring buildings and precincts.

The City of Sydney has also provided the BBP Facilities Emergency Planning Engagement Report (Cred Consulting, 2025), which offers insight into the real operating environment of BBP member organisations. It highlights common challenges such as tenant engagement, uneven training participation, varying occupancy patterns and emerging risk considerations, along with a clear appetite for more consistent guidance, improved communication tools and opportunities for precinct-level coordination. This evidence helps ensure the Maturity Framework and Toolkit remain grounded in practical needs rather than purely theoretical requirements.

Taken together, these sources show a clear shift in how emergency management is conceived. It is no longer viewed solely as a compliance obligation centred on fire evacuation, but as an integrated component of organisational resilience, risk governance, occupant wellbeing, climate risk management and city-level coordination. The review highlights the need for clearer governance pathways, more sophisticated and risk-based planning, stronger and more targeted training, diversified exercising approaches, deliberate collaboration mechanisms and structured continuous improvement.

On this basis, an enhanced BBP Emergency Management Maturity Matrix is being developed. The updated Matrix will move beyond compliance and use a Good–Better–Best scale across six domains—governance, planning, training, exercising, collaboration and continuous improvement, while also incorporating climate risk and precinct-level resilience considerations. Sector learnings, client-provided insights and contemporary standards will guide the maturity descriptors, and a companion Emergency Management Toolkit will provide practical templates, guidance and resources to support capability uplift across the BBP portfolio.

4 Purpose of the Baseline Review

The Baseline Review provides a clear picture of the current emergency management landscape across BBP members and the broader environment in which they operate. It brings together member insights, sector learnings, and relevant standards to create a well-rounded understanding of both strengths and capability gaps. Through this work, the Review identifies what is working well, where inconsistencies exist, and what emerging risks require greater attention as the sector evolves.

The Baseline Review establishes:

- A clear understanding of current expectations and practices across BBP members,
- The landscape of relevant standards, frameworks, and city plans,
- External insights from major incidents that highlight gaps in typical building readiness,
- The rationale for evolving the BBP Matrix from a compliance tool to a maturity model,
- The foundation for building consistent sector capability aligned with the City of Sydney's emergency management environment.

Together, these findings illustrate the need for a modernised approach that not only satisfies compliance requirements but strengthens resilience, coordination and decision-making across precincts. This consolidated

evidence base creates a strong platform for stakeholder consultation, co-design activities, and development of the updated maturity framework and Toolkit in the next stages of the project.

5 Methodology

The methodology for this Baseline Review combines documentary analysis, sector research, and examination of contemporary incident case studies to build a comprehensive understanding of the current emergency management environment. This approach ensures the findings are grounded in both the practical context of BBP members and the broader expectations set by standards, ESG frameworks, and city-level plans. The following sections outline the materials reviewed and the evidence sources that informed the development of the updated Emergency Management Maturity Matrix.

5.1 Desktop Review

The desktop review included:

- City of Sydney and BBP Documents
 - Sydney CBD Safety Sub Plan – reviewed and summarised for this Baseline Report
 - The City of Sydney provided the BBP Facilities Emergency Planning Engagement Report (Cred Consulting, 2025)
- Australian Standards and International Professional Guidance
 - AS 3745:2010 – Planning for emergencies in facilities
 - ISO 22301:2019 – Business continuity management systems
 - ISO 31000:2018 – Risk Management Guidelines
 - AIDR Emergency Planning Handbook
 - NEMA – National Emergency Management Guidance (Australia)
 - FEMA CPG 101 – Emergency Operations Planning (U.S. government body)
- Sustainability and Environmental, Social and Governance (ESG) Frameworks. Used to identify alignment and opportunities to increase value for BBP members:
 - WELL v2 (C14 Emergency Resources, C15 Emergency Preparedness)
 - Green Star Performance (Resilience credit stream)
 - GRESB (Risk, Resilience, Health & Safety indicators)
- External Case Studies (Sector Learnings Only). Reviewed to understand modern building challenges, communication breakdowns, and precinct impacts:
 - Bondi Junction stabbing (2024)
 - Bourke Street attack (2017)
 - Lindt Café siege (2014)
 - Manchester Arena bombing (2017)
 - Parramatta Severe Storms/Flash Flooding (2021-2022)

Note: Further details on the research can be located in Appendix A.

6 Evidence Provided by Client Materials

The City of Sydney provided the *BBP Facilities Emergency Planning Engagement Report* (Cred Consulting, 2025) to support this project. While this report does not form part of Resilient Services' assessment, it offers useful evidence about the operating context, common challenges, and improvement aspirations of BBP member organisations.

The report provides insight into the types of emergency management practices commonly in place across BBP buildings, alongside the practical barriers members encounter, for example, tenant engagement, training participation, varying occupancy patterns, and emerging risk considerations. It also highlights areas where members are seeking further support, such as improved communication tools, consistent guidance, and opportunities for precinct-level coordination.

This evidence helps ensure the Maturity Framework and Toolkit respond to real sector needs. Specifically, it informs the shaping of maturity indicators, supports the relevance of the six maturity domains, and guides the

design of survey questions and practical tools. The Cred report therefore acts as a contextual foundation that will complement the consultation activities undertaken in this project.

7 Key Findings – BBP-Relevant Insights from Standards, Sub Plan, and Sector Practice

This section synthesises the most significant themes emerging from the desktop review, mapping how contemporary standards, ESG frameworks, city-level requirements, and sector learnings shape modern expectations for emergency management in commercial buildings. These insights do not reflect an assessment of current BBP member performance; rather, they outline the evolving landscape in which BBP buildings operate and the capabilities now expected of organisations managing complex, multi-tenant assets in the Sydney CBD.

Collectively, the reviewed materials show a clear shift: emergency management is no longer viewed as a narrow compliance activity, but as an integrated component of organisational resilience, risk governance, occupant wellbeing, and precinct-level coordination. Across all sources, there is a consistent call for clearer governance pathways, more sophisticated planning approaches, stronger training practices, diverse exercising programs, deliberate collaboration mechanisms, and ongoing cycles of improvement.

These key findings highlight the gap between traditional facility-based emergency procedures and the broader, more dynamic capabilities needed to manage contemporary threats—particularly in dense urban environments marked by high occupancy, diverse tenant groups, and interdependent infrastructure. They also underscore why the updated BBP Emergency Management Maturity Framework must provide a structured pathway from compliance to best practice, enabling members to progressively build capability in alignment with modern expectations.

What follows is a summary of the critical insights across six domains, governance, planning, training, exercising, collaboration, and continuous improvement, that directly inform how maturity is defined within the updated Framework.

7.1 Governance

Across all reviewed standards and frameworks, governance is a central requirement. The reviewed standards and frameworks each highlights the need for clear leadership, defined responsibilities, and formal oversight as evidenced below:

- AS 3745 focuses on Emergency Planning Committee/Emergency Control Organisation structures but provides limited guidance on how emergency planning connects to senior leadership or whole-of-organisation governance.
- ISO 22301 and ISO 31000 both reinforce that emergency and continuity governance must be embedded within broader organisational risk management, with clear leadership accountability for emergency-related risks.
- WELL, Green Star and GRESB explicitly link emergency readiness to ESG governance, leadership visibility and occupant wellbeing.
- The Sydney CBD Safety Sub Plan assumes building managers understand CBD command arrangements and can make timely decisions aligned with police directions.

Current practice in the facilities sector often limits emergency planning responsibilities to the EPC/ECO or facility teams. However, modern frameworks require a shift from operational-only governance to organisational governance. The Maturity Framework therefore needs to:

- Promote executive visibility of emergency readiness,
- Embed emergency management into risk, resilience and ESG structures,
- Define governance expectations across Good → Better → Best so members can see how leadership involvement strengthens capability.

7.2 Planning

Modern emergency planning requires a multi-hazard, risk-based, and scenario-driven approach.

- AS 3745 covers fire and facility emergencies but provides limited guidance for:

- hostile threats,
- mass-casualty incidents,
- complex lockdown scenarios,
- multi-building or precinct-wide disruptions.
- ISO 22301 requires organisations to conduct Business Impact Analysis (BIA) and continuity planning that integrates with emergency arrangements.
- ISO 31000 strengthens this by emphasising risk-based planning, requiring organisations to assess vulnerabilities, evaluate controls and ensure arrangements are proportionate to identified risks.
- Green Star and WELL require consideration of communication systems, occupant needs, equity, and accessibility.
- The Sydney CBD Safety Sub Plan requires alignment with CBD-wide evacuation zones, transport impacts, and NSW Police decision-making structures.

This guidance demonstrates that Emergency plans need to consider more than evacuation. Buildings must plan for:

- lockdown and shelter-in-place
- crowd movement and mass-notification
- diverse occupant needs and accessibility
- multi-tenant coordination
- disruptions that affect multiple buildings and the surrounding precinct/s.

The Maturity Framework must therefore show how planning evolves from basic compliance (Good) to integrated, multi-scenario, accessible and city aligned (Best).

7.3 Training

Training is a recurring weakness across the facilities sector, particularly for non-fire emergencies.

The standards emphasise:

- AS 3745- skills-retention training for ECO roles.
- ISO 22301 - competency-based training across all relevant roles.
- ISO 31000 reinforces this by stating that personnel must understand the risks they are managing, supporting training that builds informed decision-making capability.
- WELL - clear communication channels and occupant awareness, including newcomers and shift workers.
- Sector lessons show frontline staff often lack training in:
 - lockdown procedures,
 - dynamic threat recognition,
 - mass-notification processes,
 - supporting vulnerable occupants.
 - responding to climate-related hazards such as flash flooding, storm-driven power outages, heat stress, and severe weather warnings.

Natural hazard preparedness, particularly for rapidly evolving events like severe storms and flash flooding remains a common knowledge gap across commercial facilities, despite the increasing frequency of these events.

Future training expectations therefore need to move from “frequency of training” to “effectiveness of training,” ensuring personnel are prepared to recognise emerging risks, make timely decisions, and communicate clearly across a range of emergency scenarios.

The maturity scale should track changes such as:

- Good: basic compliance training focused on fire and evacuation.
- Better: scenario-based, competency-focused training that includes non-fire and climate-related emergencies.
- Best: organisation-wide, multi-scenario capability supported by regular evaluation, refreshers, and continuous improvement loops.

7.4 Exercising

Fire evacuations are well understood, but capability for other emergency scenarios varies widely.

The standards emphasise:

- ISO 22301 and FEMA CPG 101 - multi-scenario exercising and evaluation.
- ISO 31000 reinforces the need to test whether risk controls function as intended, supporting exercises that validate the effectiveness of planned treatments.
- AIDR - using exercises to validate plans, not simply to meet compliance.
- The Sydney CBD Safety Sub Plan - precinct-level exercises, however it provides no enforcement mechanism.

The Maturity Framework must recognise that many organisations currently operate at the “Good” level (single annual fire drill). The maturity pathway should illustrate:

- Scenario variation,
- Joint exercises with tenants, neighbours or police,
- Precinct-level coordination,
- Integration of communication systems testing,
- Evaluation and corrective actions.

7.5 Collaboration

Collaboration is repeatedly identified as one of the weakest but most critical ingredients for effective emergency management.

The standards emphasise:

- AS 3745 - consultation with occupants and emergency services,
- GRESB - stakeholder communication and partnership expectations.
- ISO 31000 reinforces the importance of communication and consultation with stakeholders, supporting shared understanding of emergency-related risks.
- The Sydney CBD Safety Sub Plan - multi-building coordination, information sharing, and incident liaison roles.
- Sector experience shows collaboration is often ad hoc, informal, or dependent on individual staff.

Hence, the Maturity Framework should emphasise:

- Formalised liaison roles,
- Planned interactions with NSW Police, FRNSW and City of Sydney,
- Coordination with neighbouring buildings,
- Shared situational awareness channels,
- Tenant and contractor engagement.

This is an area where BBP can demonstrate strong leadership as a precinct network.

7.6 Continuous Improvement

Continuous improvement is the area most consistently required across all modern frameworks and most consistently underdeveloped in practice.

The standards emphasise:

- ISO 22301, ISO 31000 and FEMA emphasise lessons learned, trend analysis, performance monitoring and continuous improvement, while GRESB reinforces the need to demonstrate evidence of resilience measures and governance oversight.
- Best practice includes maintaining version control, formal debriefs and tracking corrective actions.

The Maturity Framework must help organisations shift from:

- Good: informal reviews
- Better: documented lessons and periodic updates
- Best: continuous monitoring, cross-site learning and systematic improvements

This aligns strongly with BBP's portfolio-level goals.

7.7 Climate Risk and Precinct-Level Resilience

Contemporary emergency management frameworks increasingly recognise the influence of climate-related hazards on organisational resilience. Guidance from the National Emergency Management Agency (NEMA), along with ESG frameworks such as Green Star, WELL and GRESB, emphasise the need for facilities to plan for escalating weather-driven emergencies including extreme heat, severe storms, cyclones, flooding and bushfire smoke. These hazards create operational pressures that extend far beyond traditional emergency scenarios and increasingly affect business continuity, occupant wellbeing, service disruptions and precinct-wide interdependencies.

For BBP buildings, this shift means emergency planning must consider the broader resilience role that commercial assets play during climate-related events. Facilities may be asked/required to maintain safe refuge spaces during extreme heat, provide clear evacuation and re-entry pathways during flooding, support continuity of critical operations during storm events, or manage air quality and ventilation challenges during periods of smoke or poor outdoor air quality. As climate hazards intensify, buildings must also anticipate short-notice transport disruption, increased demand for public refuge, supply chain constraints and higher occupancy fluctuations. These events can also place sustained pressure on building systems, contributing to increased energy demand, exposure to electrical surges, potential equipment damage and accelerated infrastructure degradation, with implications for asset life, maintenance planning and longer-term financial resilience.

The implications of climate change require emergency plans to incorporate multi-scenario risk assessments, the identification of climate-sensitive assets (such as basements, electrical systems or exposed plant rooms), and clear protocols for maintaining essential services. They also highlight the importance of equitable support for vulnerable occupants during heatwaves, floods or combined emergencies. These expectations align closely with NEMA's focus on resilience and preparedness at the community scale.

From a maturity perspective, a climate-aligned approach evolves from basic facility preparedness toward broader precinct and community resilience. Good practice reflects compliance-level emergency arrangements that acknowledge climate impacts and risks. Better practice includes integrated risk assessments, coordinated planning with neighbouring assets and considerations for occupant health during prolonged disruptions. Best practice positions buildings as part of a resilient precinct by enabling safe temporary refuge, maintaining critical services for longer periods, and supporting city-level climate adaptation strategies.

This climate-resilience dimension strengthens the relevance of the BBP Maturity Framework by ensuring it addresses emerging risks that are now central to the emergency management environment in metropolitan areas such as Sydney's CBD.

8 External Lessons from Major Incidents (Sector Learnings Only)

Understanding how real-world emergencies unfold is essential to designing a maturity model that reflects the complexity of modern threats and the operational realities faced by buildings in dense urban environments. To support this, a series of contemporary major incident case studies were reviewed, including hostile attacks, mass-casualty events, and climate-driven emergencies. These included the Bondi Junction attack, Bourke Street incident, Lindt Café siege, Manchester Arena bombing, and severe storm events in Western Sydney that resulted

in flash flooding in Parramatta. The research conducted and a full list of resources utilised to compile the case studies can be found at Appendix A.

These incidents are not indicative of BBP member performance, nor are they used as benchmarks for expected outcomes. Instead, they serve as learning tools that highlight systemic pain points such as communication breakdowns, decision-making uncertainty, technology limitations, cross-precinct coordination issues, and the challenges associated with rapidly evolving hazards, including severe weather events. They also show the psychological and operational impacts that ripple through communities long after the immediate threat has passed.

The purpose of examining these events is to identify the consistent themes, capability gaps, and organisational behaviours that can inform a more robust and future-focused approach to emergency management. These sector learnings directly support the shaping of the BBP Maturity Framework, ensuring it addresses the realities of contemporary risks rather than relying solely on traditional compliance-based models.

These events provide rich evidence of how people, systems, and precincts behave under pressure, revealing challenges that are not captured in standards or compliance guidance alone. Across all incidents, consistent themes emerged, as discussed below.

8.1 Communication and situational awareness challenges

Real-world emergencies show that occupants, tenants and staff often experience confusion or lack of clarity about what is happening and what action to take. These communication delays emphasise the need for:

- Clear, building-wide and or mass-notification processes,
- Rapid decision-making pathways,
- Pre-defined communication templates,
- Mechanisms to counter misinformation.

8.2 Lockdown vs evacuation decision-making

Dynamic threats frequently require lockdown or shelter-in-place, not evacuation. Case studies repeatedly show uncertainty about:

- When to lockdown,
- When to evacuate,
- Who the decision maker is,
- How that decision is communicated.

These insights highlight why “lockdown capability” needs to be embedded in the maturity model.

8.3 Control-room and systems readiness

Across incidents, CCTV visibility, access controls, and intercom/PA systems played a key role in situational awareness. This reinforces the importance of:

- System redundancy,
- Integrated communication channels,
- Clear protocols for monitoring and decision support.

8.4 Coordination across tenants, contractors and neighbouring buildings

Emergencies affect whole precincts, not just single buildings. In multiple incidents, inconsistent responses between neighbouring facilities contributed to confusion and delays. This underscores the need for:

- Shared situational awareness,
- Precinct-level coordination,
- Consistent messaging and protocols.

8.5 Psychological and operational impacts

Incidents show ongoing impacts on workers, businesses and the public, reinforcing the importance of:

- Recovery,

- Welfare, and psychosocial support,
- Business continuity arrangements,
- Inclusion of long-term communication strategies in emergency planning.

8.6 Relevance to the BBP Maturity Framework

The lessons drawn from major incident case studies reinforce the need for a maturity model that extends well beyond basic compliance requirements. They highlight the importance of embedding multi-scenario threat planning, including both intentional acts and climate-driven hazards, into organisational preparedness, ensuring that buildings and precincts are equipped to respond to a range of complex and evolving emergencies. Central to this is the development of strong communication capability, as effective and timely information flow consistently emerges as a critical factor in managing modern incidents.

These learnings also demonstrate the value of precinct-level coordination, where neighbouring buildings and organisations work from aligned protocols and shared situational awareness rather than responding in isolation. A mature approach must therefore support building-wide responses that are integrated with broader city systems, ensuring cohesion during fast-moving events.

Finally, the sector insights emphasise that recovery and continuous improvement are essential components of contemporary emergency management. This requires organisations to plan not only for the immediate operational response but also for the longer-term impacts on people, business functions, and community confidence. These considerations collectively inform how the “Better” and “Best” maturity levels are articulated across the six BBP domains.

9 Enhanced BBP Emergency Management Maturity Matrix

The updated BBP Emergency Management Maturity Matrix is designed to move organisations beyond minimum compliance and toward a structured, progressive pathway for capability development. It spans six core domains: governance, planning, training, exercising, collaboration, and continuous improvement. In addition, it sets out what “Good”, “Better”, and “Best” performance looks like in real-world terms. The framework draws on recognised standards, ESG expectations, city-level planning requirements, and broader sector learnings to define a practical, evidence-based approach to emergency management uplift.

A key enhancement in the updated Matrix is the introduction of a Good–Better–Best maturity scale that is informed by multiple benchmarks and guidance sources. These references ensure that the maturity model reflects contemporary expectations around resilience, occupant wellbeing, governance, and multi-agency coordination.

Evidence sources shaping the maturity scale include:

- AS 3745 – baseline facility requirements: provides the essential starting point for emergency planning and facility safety obligations.
- ISO 22301 and ISO 31000 – risk-based governance, continuity integration, structured assessment and continuous improvement principles that underpin modern capability expectations.
- WELL (C14, C15) – occupant support, communication and accessibility reinforce the importance of clear information flows, inclusivity, and human-centred design in emergency arrangements.
- Green Star Performance – resilience, inclusivity and organisational preparedness introduce broader sustainability and resilience considerations beyond traditional emergency planning.
- GRESB – governance, risk and resilience expectations: highlights investor and governance-level requirements for demonstrating risk oversight and proactive resilience practices.
- Sydney CBD Safety Sub Plan – precinct coordination and city-level alignment emphasise the need for consistency and coordination in dense urban environments where incidents affect multiple assets.
- AIDR and FEMA guidance– multi-scenario planning, exercising, continuity and improvement: provide guidance for building robust, scalable, and repeatable capability across a range of threat types and operational contexts.
- NEMA national resilience and climate hazard guidance – recognising the increasing influence of extreme heat, storms, floods, smoke and other climate-related risks on facilities and precinct readiness.

These sources collectively inform how the Good–Better–Best spectrum is defined and applied within the Matrix.

How these inputs shape the maturity progression:

- “Good” represents strong foundational practice aligned with AS 3745, essential ESG requirements and core risk-based principles drawn from ISO 22301 and ISO 31000. At this level, organisations meet compliance expectations and have the fundamental elements of emergency management in place.
- “Better” reflects a more proactive and structured capability, where risk-informed and scenario-based planning, broader staff training and stronger cross-organisational collaboration begin to develop and mature.
- “Best” represents a fully integrated and resilient approach characterised by engaged leadership, precinct-level coordination, inclusive and accessible emergency arrangements, and clear alignment with city-level and national resilience expectations, including those reflected in the Sydney CBD Safety Sub Plan and NEMA’s climate-informed preparedness principles.

Taken together, this progression provides BBP members with a clear and practical roadmap for growth, regardless of their starting point, ensuring that uplift is achievable, measurable, and tied to recognised best practice.

9.1 Evidence Inputs Informing the Matrix

The Emergency Management Maturity Matrix is shaped by a combination of member-specific insights and broader sector evidence, ensuring that it reflects both the real-world operating context of BBP buildings and the emerging risks associated with complex urban environments. Together, these inputs create a maturity framework that is both practical and future-focused, offering meaningful guidance for uplift across the property sector.

A key evidence stream comes from the BBP member context itself. The client-provided Cred Consulting Engagement Report, along with insights expected from the upcoming BBP survey, provide essential visibility into the day-to-day challenges facing property managers, facility teams and building stakeholders. These sources highlight recurring operational barriers, such as:

- Tenant engagement: difficulties in achieving consistent participation and awareness across diverse tenant groups,
- Training participation: variable uptake in emergency training, creating uneven capability across buildings,
- Inconsistency across portfolios: differing levels of preparedness and procedure maturity within the same organisation,
- Communication expectations: rising demands for clear, timely and accessible information before, during and after incidents.

These member insights ensure the Matrix is grounded in genuine sector needs rather than theoretical or purely standards-driven requirements.

A second major evidence input comes from sector learnings derived from major incidents. High-profile case studies reveal capability gaps that compliance standards alone do not address, offering critical lessons about how modern emergencies unfold in dense city environments. These include:

- Lockdown readiness: the need for well-practised and clearly communicated shelter-in-place arrangements,
- Multi-scenario decision-making: recognising that incidents evolve rapidly and often require non-traditional response actions,
- Communication delays: the widespread confusion and misinformation that emerge when systems and protocols are insufficient,
- Precinct-wide disruption: the ripple effects that extend beyond individual buildings, affecting transport, neighbouring assets and public movement.

These findings directly influence the expectations set at the “Better” and “Best” maturity levels, ensuring higher tiers reflect modern operational realities.

In addition to evidence inputs, the updated Matrix incorporates capability areas aligned with contemporary emergency risks, elements increasingly recognised as essential in a dense CBD environment but not traditionally included in compliance-based models. These include:

- Lockdown and shelter-in-place protocols that address fast-moving and atypical threats,
- Multi-scenario and dynamic threat planning to account for evolving incident types,
- Precinct coordination and communication pathways that support alignment across neighbouring buildings,
- Building-wide mass-notification and system integration to ensure rapid and consistent messaging,
- Accessibility and inclusive occupant support, reflecting contemporary expectations for equitable emergency response,
- Business continuity alignment to ensure operational impacts and recovery are appropriately managed,

Incorporating these capability areas modernises the Matrix and supports a more holistic approach to emergency preparedness.

To further anchor the framework in real-world practice, the Matrix is supported by an updated stakeholder map that reflects the networked nature of emergency management in the CBD. This map identifies the internal and external groups whose roles, responsibilities and interactions shape a building's emergency capability.

Internal stakeholders include:

- Property managers
- Facility management teams
- Corporate safety, risk and ESG teams
- Security providers
- Tenants, customers, visitors and contractors

External stakeholders include:

- NSW Police (Primary Control Agency)
- Fire & Rescue NSW
- Ambulance NSW
- City of Sydney
- Transport for NSW
- Neighbouring buildings and precinct networks
- BBP member organisations

Recognising these interdependencies ensures that the maturity model accounts for shared responsibility and coordinated action—an essential feature of emergency planning in a high-density precinct.

Together, these evidence inputs and stakeholder considerations shape a maturity pathway that is practical, relevant, and aligned with the operational realities of BBP buildings, ensuring the Matrix supports meaningful and achievable capability uplift across the sector.

10 Conclusion

This Baseline Report establishes a robust foundation for the development of the BBP Emergency Management Maturity Framework and Toolkit. By bringing together standards, ESG and resilience frameworks, city-level requirements, client-provided engagement insights, national guidance and real-world incident learnings, the report confirms that a compliance-only approach is no longer sufficient for buildings operating in a complex CBD environment.

The evidence points to a clear set of capability needs stronger organisational governance of emergency risk, multi-hazard and risk-based planning, more effective and scenario-focused training, broader exercising beyond fire evacuation, deliberate collaboration inside and outside the building, and genuine continuous improvement. The findings also reflect the increasing influence of climate-related hazards, where emergencies may involve prolonged disruption, repeated activation and cascading impacts on access, services and occupant wellbeing, rather than short-duration events.

Across the reviewed materials, commercial buildings are positioned as active contributors to precinct resilience, with responsibilities that extend beyond immediate life safety to include continuity of operations, support for

occupants during extended disruption, and coordination with neighbouring assets and public agencies during severe weather events such as storms, flooding, heat and smoke.

The enhanced BBP Emergency Management Maturity Matrix responds to these needs by offering a structured Good–Better–Best pathway across six domains, aligned with recognised standards, ESG expectations and the Sydney CBD Safety Sub Plan. It is designed to be practical and achievable, providing BBP members with a clear view of what progressive improvement looks like while accommodating differing asset types, operating contexts and maturity starting points across the portfolio.

As the project progresses into consultation, co-design and detailed development of the Matrix and Toolkit, the insights captured in this Baseline Report will guide the refinement of maturity indicators and supporting resources. The final Framework and Toolkit will aim to strengthen consistency, resilience and preparedness across BBP buildings, improving outcomes for tenants, workers, visitors and the broader precinct, and reinforcing BBP’s leadership in city-aligned, resilience-focused emergency management.

Appendix A Case Study Evidence

AA Case Study: Bourke Street Mall Mass Casualty Incident (Melbourne, 20 January 2017)

On 20 January 2017, at approximately 1:30 pm, a vehicle was deliberately driven along the footpaths of Melbourne's CBD, entering the Bourke Street Mall and striking dozens of pedestrians. The offender continued through several city blocks before being stopped by Victoria Police.

The attack resulted in six deaths and more than 30 injuries, making it one of Melbourne's most significant mass-casualty events in a dense urban precinct.

This incident was not an isolated road crash—it was a hostile vehicle attack in one of Australia's busiest retail and office locations, directly affecting workers, building operations, tenants, bystanders and the broader CBD economy.

AA1 Citywide Emergency – Building-Focused Summary

Although emergency services led the overall response, their actions had immediate impacts on surrounding buildings and precinct operations. Victoria Police rapidly stopped the vehicle and established a multi-block crime scene, which resulted in unplanned lockdowns and restricted movement for nearby buildings. Reviews later highlighted gaps in command and communication, reinforcing the need for buildings to have clear internal decision pathways during fast-moving CBD incidents. Ambulance Victoria activated a mass-casualty response, and the concentration of emergency vehicles and personnel created further access disruptions for tenants, workers and building operators. Many nearby employees and bystanders became first responders, providing critical aid before emergency services arrived—demonstrating that building occupants may unexpectedly play an essential role during such events. Recovery agencies then supported affected workers, tenants and businesses, highlighting the long-term psychological and operational effects major CBD emergencies can have on the surrounding built environment.

AA2 Evidence Summary – Impact on Surrounding Buildings & Precinct

While no building-level emergency logs were published, multiple verified sources provide a clear picture of how nearby buildings were affected:

Lack of Situational Awareness Inside Office Towers

A worker in a major Bourke Street office building (NAB) described:

- “Chaos” inside the building as the event unfolded.
- No internal communication about what was happening outside.
- Staff didn't know whether to evacuate or shelter in place, despite witnessing casualties from their windows.

This demonstrates a critical gap in building-level intelligence, communication pathways, and role clarity.

Impact on Retail and Street-Level Businesses

Interviews with shop and kiosk workers on Bourke Street found:

- Staff witnessed people being struck by the vehicle.
- Tenants described panic, running, and confusion among both workers and the public.
- Some workers required ongoing psychological support or months off work.

These impacts highlight the increased vulnerability of public-facing, ground-floor tenants during fast-moving emergencies.

Recognition of the Event as a Workplace Emergency

AIDR and recovery agencies later published guidance specifically for “nearby workers”, recognising that:

- CBD mass-casualty events are also workplace emergencies.
- They require building management involvement in welfare checks, business continuity and communication.

AA3 Citywide Improvements Affecting Buildings

Following the incident, the Victorian Government introduced:

- Hostile Vehicle Mitigation (HVM) measures across Melbourne’s CBD (bollards, barriers, road redesign).
- Updated crowded places guidance for building operators and venue managers.
- Improved police pursuit governance and command protocols, partly in response to the coroner’s findings.

These changes show that building and precinct-level emergency planning must evolve with city policies.

Governance Failures Inform Building Governance

Independent media analyses of the coroner’s findings highlight that confused command structures and slow communication worsened the incident impact.

This reinforces for buildings the need for:

- Clear EPC/ECO authorities
- Defined decision rights
- Real-time information pathways

Legal Implications for Building Duty of Care

Analysis from Australian Emergency Law noted broader legal themes such as:

- Foreseeability of risk
- Reasonable steps to protect staff and occupants
- Organisational liability during CBD-wide emergencies

This underscores why BBP members must plan for low-probability, high-impact events.

Crowded Place Vulnerability

Victim interviews and news coverage showed that high-footfall environments (retail podiums, food courts, foyers) were heavily impacted, reinforcing the need for building-specific planning for retail interfaces and public-access areas.

AA4 Implications for the BBP Emergency Management Maturity Framework

Governance

- Buildings need clear authority structures for evacuation vs. shelter-in-place decisions.
- A defined liaison role must exist for communication with police and city emergency coordinators.

Planning

- Emergency plans must address hostile vehicle scenarios and other high-impact urban threats.

- Plans should align with city-level frameworks and specify how external intelligence is received.

Training

- ECO/Warden teams require training in:
 - Rapid decision-making
 - Situational awareness
 - Internal communication during ambiguous threats
- First-aid capability should be strengthened across facilities.

Exercising

- Multi-building or precinct-level exercises are essential to test coordinated communication and interoperability.

Collaboration

- Strong relationships with police, transport authorities and city agencies should be built pre-incident.
- Building systems must support fast, verified updates (not reliant on media or social media).

Continuous Improvement

- The incident demonstrates the need for:
 - A lessons-learned register
 - Regular updates to emergency plans
 - Cross-portfolio sharing of improvements
- BBP members can adopt this incident as a benchmark scenario when reviewing their own maturity.

AA5 Conclusion

The Bourke Street Mall attack revealed how quickly a mass-casualty incident can unfold in a dense CBD environment, and how profoundly it affects buildings, tenants, workers and precinct operations.

While emergency services performed strongly in trauma management and public safety, the incident exposed significant gaps in:

- building-level situational awareness,
- communication flows,
- decision-making authority, and
- preparedness for citywide, multi-agency emergencies.

For BBP, this incident provides a high-value case study to strengthen the Emergency Management Maturity Framework by emphasising:

- integrated governance,
- modern communication systems,
- precinct-wide collaboration, and

- continuous improvement across the property sector.

It clearly illustrates why member organisations must progress beyond minimum compliance toward fully integrated, resilience-focused emergency preparedness.

AA6 Resource Links Used in This Case Study

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3. <https://knowledge.aidr.org.au/resources/criminal-bourke-st-mall-incident-victoria-2017/>
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5. <https://knowledge.aidr.org.au/resources/criminal-bourke-st-mall-incident-victoria-2017/>
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AB Case Study: Lindt Café Siege (Sydney, 15–16 December 2014)

On the morning of 15 December 2014, a gunman entered the Lindt Chocolate Café on Martin Place in Sydney's CBD and took 18 people hostage. The siege unfolded inside a ground-floor retail tenancy of the APA Building, located within one of Australia's busiest commercial precincts and surrounded by banks, media organisations, courts, consulates and major transport links.

The siege lasted for around 16–17 hours, ending in the early hours of 16 December 2014 after police entered the café. Two hostages were killed, and several others were injured. Because the incident occurred in a dense commercial area at peak business time, it created immediate building-level, tenant-level and precinct-wide impacts far beyond the café itself.

AB1 Citywide Emergency

Emergency services took operational control of the situation, but their actions had immediate consequences for the surrounding built environment. Police rapidly established a multi-block exclusion zone, resulting in widespread evacuations, building lockdowns and restricted movement. Workers in nearby office towers were either instructed to remain indoors and away from windows or directed to evacuate entirely, depending on their proximity to the café and unfolding police advice.

Ambulance services and tactical police units occupied surrounding streets, creating further access restrictions for building occupants, tenants, and operators. The presence of major media outlets in Martin Place amplified public interest and increased pressure on building management teams to manage staff movement and communication.

The prolonged duration of the siege disrupted normal business operations across the precinct, with several banks closing branches, legal chambers suspending operations, and retail premises ordering early shutdowns.

These impacts demonstrate how a high-risk incident at a single commercial tenancy can evolve into a whole-precinct emergency, requiring extensive decision-making and communication from building and facility managers.

AB2 Evidence Summary – Impact on Surrounding Buildings & Precinct

Although building-level emergency logs were not publicly released, consistent verified evidence reveals how nearby buildings managed the event and how the precinct was affected.

Crisis Response Inside Surrounding Office Buildings

A case study from senior risk officers in the precinct identified several internal actions taken within minutes of the siege being recognised:

- Internal crisis management teams were activated to coordinate building operations.
- Buildings initiated controlled lockdown procedures, including restricting lift access to ground-level floors.
- Mass notification systems were used to communicate rapidly with employees across multiple floors and tenancies.
- Staff received regular internal updates to counter misinformation circulating on television and social media.
- Risk leaders engaged in informal coordination with neighbouring buildings, helping maintain consistent occupant directions across the precinct.

These actions demonstrate how high-rise buildings immediately relied on internal governance systems to manage safety, information and movement.

AB3 Evacuation, Lockdown and Movement Restrictions

Media and official reports documented significant disruption to office towers, retail tenancies and civic buildings:

- Some buildings were fully evacuated, particularly those directly adjacent to the café.
- Others enacted shelter-in-place, requiring staff to remain inside and away from windows.
- Workers returning from breaks were unable to re-enter their buildings due to expanding exclusion zones.
- Major institutions including banks, law firms, consulates, courts and retail businesses closed or suspended services.
- Staff described a tense and uncertain environment, particularly in buildings with direct sightlines into the café.

These impacts highlight the complexity of managing multiple tenancies during an evolving police-led incident.

AB4 Worker and Tenant Experience

Reports indicated:

- Workers in upper-floor offices watched the situation unfold and experienced significant distress, particularly those with direct visibility into the café.
- Legal chambers and court facilities in the vicinity were evacuated, with hearings cancelled.
- Some employers provided counselling, debriefing and wellbeing support in the aftermath.
- Tenants across the precinct adjusted operations for the remainder of the day, with many implementing business continuity procedures such as directing staff to work from home.

This demonstrates the significant human impact on workers even without direct physical exposure to harm.

AB5 Physical and Environmental Considerations

A forensic reconstruction of the incident highlighted several environmental factors relevant to building occupants:

- Sight lines from nearby buildings meant many workers directly observed parts of the siege.
- Building geometry, lighting and proximity influenced what occupants could hear and see.
- Ground-floor retail locations were particularly exposed due to open public access and glass frontages.

These findings demonstrate how physical building characteristics influence situational awareness and risk exposure.

AB6 Long-Term Precinct Changes

A decade after the siege, reviews highlighted lasting changes across the Sydney CBD:

- Installation of hostile vehicle mitigation infrastructure in high-profile areas.
- Enhancements to police–city–building communication pathways.
- Updates to counter-terrorism frameworks, requiring greater coordination with building owners and managers.
- Ongoing commemorative practices reflecting long-term community impact on Martin Place.

These changes demonstrate how city policy and precinct planning evolve following major emergencies.

AB7 Integrated Building Management Lessons

Drawing together evidence from media, inquiries, professional analysis and operational reviews, several key themes emerge:

1. Fast, centralised communication systems were essential
Mass notification tools were widely used to provide consistent building-wide instructions during rapidly changing conditions.
2. Multi-tenant buildings needed synchronised direction
Occupants in different tenancies initially received mixed guidance. Building managers became the central point for harmonising instructions.
3. Ground-floor retail had heightened exposure
The Lindt Café's street-facing layout shows that retail tenancies require unique planning distinct from commercial office floors.
4. Partial evacuation and shelter-in-place decisions varied
Buildings needed clear criteria for when to evacuate or remain in place, supported by trained wardens and predefined messaging.
5. Business continuity arrangements were activated
The 16-hour duration forced organisations to implement remote work, crisis communication, HR support and operational adjustments.
6. Police relied on building managers for critical information
Building intelligence such as CCTV access, floor layouts and secure entry points was used to support the tactical response.

AB8 Implications for the BBP Emergency Management Maturity Framework

Governance

- Buildings require clear internal authority for decision-making during external, police-led incidents.
- Liaison roles and governance structures must align with city and emergency service arrangements.

Planning

- Emergency plans must address siege-type, armed offender and other high-consequence CBD scenarios.
- Plans should link directly with business continuity arrangements.

Training

- ECO and wardens require training in interpreting incomplete information, issuing rapid guidance and managing building movement.
- Awareness training should prepare staff for extended lockdowns and evolving instructions.

Exercising

- Multi-building and precinct-level exercises should simulate police cordons, movement restrictions and communication challenges.

Collaboration

- Relationships with police, City of Sydney, precinct associations and neighbouring buildings should be established pre-incident.

Continuous Improvement

- Lessons from the siege should inform regular reviews of emergency plans, training and communication systems.
- BBP members should share insights across portfolios to support sector-wide capability uplift.

AB9 Conclusion

The Lindt Café siege demonstrates how a single armed offender event can escalate into a precinct-wide emergency, affecting thousands of workers and disrupting operations across multiple buildings. The incident exposed challenges in communication, building coordination, decision-making under uncertainty and cross-precinct collaboration.

For BBP members, this case reinforces the need for integrated governance, coordinated multi-tenant communication systems, alignment with city emergency frameworks and continuous improvement. It remains a defining example of why CBD-based organisations must progress far beyond minimum compliance toward mature, resilience-focused emergency management.

AB10 Resource Links Used in This Case Study

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3. <https://www.sbs.com.au/news/article/sydney-siege-hostages-held-at-martin-place-cafe/fbofigwum>
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AC Case Study: Manchester Arena Bombing (Manchester, UK – 22 May 2017)

On 22 May 2017 at 10:31 pm, an improvised explosive device (IED) was detonated in the City Room foyer of Manchester Arena at the end of a sold-out Ariana Grande concert.

The explosion occurred in a transitional space between the Arena and Manchester Victoria Station, a major commuter rail hub.

The blast killed 22 people, injured more than 800, and triggered a large-scale, multi-agency emergency operation across Manchester's city centre. Because the attack took place at the junction of a major indoor venue, transport interchange, and commercial precinct, the event had immediate and significant impacts on surrounding buildings, transport operations, businesses and public spaces.

AC1 Citywide Emergency – Building-Focused Summary

Although police and emergency services led the operational response, their actions had immediate consequences for the broader precinct.

A large cordon was established around the Arena and Victoria Station, forcing the closure of the station, evacuation of adjoining commercial buildings, and heavy restrictions on foot and vehicle movement through the inner city.

Hundreds of concertgoers fled into nearby buildings and restaurants seeking shelter, prompting improvised refuge areas inside hotels, retail shops and office lobbies.

Local building managers and security staff coordinated temporary lockdowns, assisted evacuees, and provided space for triage and reunification of uninjured spectators.

The presence of emergency vehicles, ambulances, armed police and media created extensive access disruption across the city centre and directly affected building operations, tenant safety decisions, and overnight business continuity planning.

Many businesses remained closed the following day due to cordons, police investigations and staff distress.

AC2 Evidence Summary – Impact on Surrounding Buildings & Precinct

Multiple verified sources, including the *Kerslake Report* (the official independent review), media accounts, local authority records, and testimony from building occupants, provide a detailed picture of how the built environment was affected.

Evacuations and Lockdowns Across the City Centre

- The Arena, Victoria Station and their connecting concourse were fully evacuated.
- Nearby commercial buildings, including restaurants, retail outlets and offices within the Arndale precinct, enacted shelter-in-place or lockdown procedures.
- Hotels in the surrounding blocks—such as the Holiday Inn and Park Inn—served as ad hoc refuge points for fleeing concertgoers, many of whom ran into buildings for safety.

Many buildings were unable to reopen the following day due to forensic activity and transport disruption.

Building Managers Providing Immediate Refuge and Support

Eyewitness and building-management accounts showed:

- Shops, hotels and restaurants opened their doors to hundreds of distressed people who fled the blast site.
- Building staff provided water, first aid, blankets, and helped reunify children and family groups.
- Several hotels set up informal triage zones until emergency responders could reach all casualties, due to the scale of the event.

- Some buildings converted meeting rooms and lobbies into safe rooms for minors separated from parents.

This demonstrates the vital role that non-emergency buildings played in immediate humanitarian support.

Complexity for Multi-Tenant Retail and Transit Precincts

Manchester Arena connects directly to:

- a major railway station,
- a shopping precinct,
- multiple retail podiums, and
- surrounding commercial office towers.

The IED detonated in a shared foyer space—not inside the venue bowl.

This resulted in:

- confusion over who controlled which part of the building,
- challenges communicating across multiple operators (Arena, station managers, transport police, security contractors), and
- delays in coordinated response due to jurisdictional complexity.

These issues are documented in the Kerslake Review and highlight the challenges of managing shared-ownership precincts during emergencies.

Communication & Information Flow Failures

The Kerslake Report found significant communication issues which directly affected buildings:

- The Arena's internal PA system was not used to issue instructions to crowds still inside.
- Information about the explosion was fragmented, creating uncertainty for nearby building operators.
- Social media and news outlets provided information faster than official communication channels, causing confusion for building managers attempting to issue guidance.

Buildings therefore faced a rapidly evolving situation with incomplete or unverified information.

Transport Shutdown and Precinct Isolation

Manchester Victoria Station was closed for several weeks.

The immediate closure resulted in:

- blocked access routes around the Arena precinct,
- suspended tram, rail and bus services,
- delayed staff commute options,
- reduced CBD footfall for several days.

This had significant impact on nearby retail and office buildings, many of which experienced partial closure or reduced occupancy in the days following the incident.

Local Businesses and Community Response

Local cafés, shops and hotels provided:

- temporary shelter for thousands of people,
- free rooms, transport, food, and charging stations,
- safe waiting areas for children and families.

The “#RoomForManchester” spontaneous campaign saw hundreds of residents and businesses offer accommodation, demonstrating community-led resilience embedded in the built environment.

AC3 Implications for the BBP Emergency Management Maturity Framework

Governance

- Buildings need clear authority structures that apply during multi-agency, fast-moving incidents.
- Shared spaces (e.g., foyers, concourses) require joint governance agreements between venue, transport operators, and adjoining buildings.

Planning

- Plans must consider crowded-place risks, explosive devices, and events occurring in shared or transitional public areas.
- Integration between venue plans, transport operators and adjacent buildings is essential for CBD precincts.

Training

- Staff must be trained to support evacuees, manage panic, and provide rapid internal communication when external guidance is limited.
- Training should include shelter-in-place and lockdown procedures for large influxes of displaced people.

Exercising

- Multi-building and multi-agency exercises should test communications, evacuation of shared facilities, and precinct-wide coordination.
- Simulations should reflect after-event movement patterns, including mass self-evacuation into buildings.

Collaboration

- Strong relationships between venue operators, security contractors, transport authorities, and building managers must be established pre-incident.
- Mechanisms for real-time information sharing across precincts are essential.

Continuous Improvement

- Lessons identified in the Kerslake Report should be reflected in emergency plan updates, including communication systems, interoperability improvements and joint governance models.

AC4 Conclusion

The Manchester Arena bombing demonstrates how a single blast in a shared public–private space can escalate into a precinct-wide humanitarian and operational emergency, placing significant demands on surrounding buildings and businesses. Buildings became impromptu refuges, communication hubs and temporary safe zones, while transport shutdowns and cordons disrupted operations across the city centre.

For BBP, this case reinforces the need for integrated precinct planning, robust communication systems, shared-governance arrangements for multi-operator environments, and strong collaboration between buildings, transport hubs, and emergency services.

It shows why emergency preparedness for CBD assets must extend beyond individual building compliance to precinct-level resilience thinking.

AC5 Resource Links Used

- <https://www.manchester.gov.uk/kerslake>
- <https://www.greatermanchester-ca.gov.uk/what-we-do/emergency-planning/kerslake-report/>
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- <https://www.theguardian.com/uk-news/2017/may/23/manchester-explosion-people-open-doors-to-help-stranded-concertgoers>
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AD Case Study: Bondi Junction Stabbing – Facility & Precinct Emergency Management

On Saturday 13 April 2024, a lone attacker armed with a knife began moving through multiple levels of Westfield Bondi Junction, targeting shoppers and staff. The attack was rapid and unpredictable, occurring during peak weekend trading.

Police responded within minutes and fatally shot the attacker inside the centre.

Despite this swift intervention, six people were killed and many others injured, triggering one of Sydney's most significant retail-precinct emergencies in recent years.

The incident caused immediate large-scale disruption across the centre and surrounding buildings, with prolonged operational, psychological and community impacts.

AD1 Citywide / Precinct Emergency – Facilities-Focused Summary

Although police and paramedics led the tactical response, the event had major operational consequences for building management, tenants, and surrounding infrastructure:

- Rapid building-wide evacuation and partial lockdown occurred as shoppers fled, and tenants attempted to secure premises.
- A significant presence of police, ambulance, tactical units and forensic teams created extended precinct disruption, including transport rerouting and restricted access to adjacent buildings.
- Building operators, security teams, and tenants were required to make high-pressure decisions with incomplete information.
- PA systems and alarms were activated, although coronial evidence later showed announcement delays and incorrect messaging.
- Thousands of people were displaced suddenly, requiring crowd management, safe egress routing, and support for distressed occupants.
- Post-incident recovery included mental health mobilisation, crisis support hotlines, and extended closure of parts of the centre.

The event exposed several critical dependencies between emergency services, property management, security operations, and precinct-level infrastructure.

AD2 Evidence Summary — Facility, Operations & Management Impacts

Security Control Room Gap

According to ABC coronial inquest reporting, the security control room was temporarily unstaffed when the attacker began stabbing people.

- One operator was in training off-site.
- The second operator had briefly stepped away.
- This resulted in delayed camera monitoring, delayed escalation, and reduced situational awareness in the crucial first moments.

Delayed and Incorrect Public Messaging

Inquest testimony revealed that:

- The first evacuation announcement came around 20 minutes after the attack began.

- The message issued was “evacuate”, which may have moved fleeing shoppers towards danger rather than into secure locations.

Inconsistent Tenant Responses

Footage and interviews show that tenants took a variety of actions:

- Some locked down immediately, pulling shutters and securing staff/customers.
- Others sheltered in stockrooms or behind counters.
- Many shops evacuated independently when people began running past.
This variation reflects the absence of a coordinated, pre-trained response framework for an armed-offender scenario.

AD3 Emergency Services Integration Challenges

Emergency services required:

- Immediate access to CCTV (delayed due to control room gap).
- Clear evacuation routes free of returning shoppers.
- Coordination with centre management to secure multi-level zones.
- Rapid triage areas in accessible locations.

Building management had to support these needs quickly while also managing thousands of distressed occupants.

Precinct & Transport Disruption

Transport for NSW and local police restricted movement around Bondi Junction Interchange:

- Train station and bus routes were temporarily closed or rerouted.
- Access to adjacent buildings (offices, apartments) was restricted.
- Tenants and workers in nearby buildings were advised to shelter or avoid the precinct.

Community & Staff Recovery Needs

The NSW Government launched a “major disaster mental health response”, supplying trauma counsellors and long-term support services for:

- Retail staff
- Shoppers
- Centre workers
- Security personnel

This demonstrates the long tail of psychosocial impacts following major CBD incidents.

AD4 Key Emergency Management Lessons for Buildings & Precincts

Governance

- Control rooms must *never* be left unstaffed in major centres.
- Clear protocols needed for mass-casualty and armed-offender events, not just fire.

Planning

- Emergency plans should include scenario-specific messaging (evacuate vs hide vs lockdown).
- Plans should define tenant expectations during violent incidents.

Training

- Centre staff, security, tenants and cleaners need drills and scenario-based awareness training.
- Specific training must address armed-offender response, not just fire evacuation.

Exercising

- Multi-scenario drills should be standard:
 - lockdown,
 - active-attacker,
 - evacuation under duress.
- Exercises must include communications testing.

Collaboration

- Information flow between building operators and police must be immediate and reliable.
- CCTV access procedures must be streamlined.

Continuous Improvement

- After-action reviews must be undertaken after every incident.
- Lessons should be shared across portfolios and precincts.

AD5 Conclusion

The Bondi Junction stabbing attack exposes the vulnerabilities of high-traffic retail and mixed-use buildings during fast-moving violent emergencies. The delays in detection, messaging, coordination and decision-making highlight the need for:

- mature governance arrangements,
- multi-scenario emergency planning,
- consistent tenant engagement,
- integrated precinct-level response capability, and
- robust recovery and crisis-support pathways.

This case emphasises that modern emergency management must go well beyond compliance, aligning with a holistic, resilience-oriented maturity model — exactly what BBP is now developing.

AD6 Resource Links Used

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AE Case Study: Severe Storms and Flash Flooding Impacts - Parramatta (Western Sydney, 2021–2022)

Between March 2021 and July 2022, Parramatta and surrounding Western Sydney suburbs experienced a series of severe storm events associated with east coast low-pressure systems and extreme rainfall. These storms produced intense, short-duration downpours that overwhelmed drainage networks and catchments, leading to rapid-onset flash flooding as well as riverine flooding along the Parramatta River and its tributaries.

Rather than a single disaster, the area was affected by multiple storm-driven flooding episodes over an extended period. The compounding nature of these events created escalating impacts for commercial buildings, transport networks, utilities and the broader CBD precinct. The Parramatta experience highlights how severe storms can trigger sudden flash flooding with limited warning, placing immediate pressure on building operations and emergency decision-making.

AE1 Citywide Emergency – Building-Focused Summary

The severe storms and resulting flash flooding triggered repeated emergency responses coordinated by NSW State Emergency Service (SES), with support from local councils, transport agencies and utilities. Storm warnings, flood watches, evacuation orders and road closures were issued as rainfall intensity and runoff exceeded system capacity.

For buildings in and around the Parramatta CBD, the storm-driven emergency translated into:

- Sudden loss of access due to rapidly flooded roads, underpasses and transport corridors
- Evacuations of low-lying commercial buildings and mixed-use developments as water entered basements and ground floors
- Disruption to power, communications, waste services and deliveries caused by storm damage and flood impacts
- High uncertainty for occupants and building managers as conditions escalated quickly and changed over short timeframes

The speed and unpredictability of flash flooding required building managers to make rapid decisions with limited lead time, shifting the focus from routine emergency response to sustained disruption management and recovery.

AE2 Evidence Summary – Impact on Buildings & Precinct Operations

Exposure of Basement and Ground-Level Assets

Intense rainfall from severe storms caused flash flooding of basements, car parks, loading docks and plant rooms. Electrical switchboards, lift systems, fire services and communications infrastructure located below ground were particularly vulnerable. In several cases, buildings that avoided direct inundation still experienced operational failure due to storm-related power interruptions or water ingress affecting shared services.

Access and Occupancy Disruption

Even where structural damage was limited, stormwater flooding and transport shutdowns prevented tenants and staff from safely accessing buildings. Rail suspensions, road closures and safety cordons rendered many offices unusable for extended periods, accelerating remote working and exposing dependencies between buildings and surrounding infrastructure.

Limited Lead Time and Rapid Escalation

Severe storm cells produced rapid rainfall accumulation, leaving limited time to activate protective measures. Building managers were required to interpret storm warnings, monitor local conditions, decide when to isolate services or evacuate and communicate clearly with tenants as conditions deteriorated quickly.

Recovery and Re-entry Challenges

Recovery extended well beyond the storm events themselves. Buildings faced prolonged clean-up, drying and remediation, inspections of electrical and fire systems before re-occupation, insurance assessments and heightened tenant concern about future storm and flood exposure.

AE3 Sector Observations Relevant to Commercial Buildings

Severe Storms as a Trigger for Flash Flooding

The Parramatta events demonstrate that severe storms can generate flash flooding even outside traditional floodplain areas. Emergency arrangements focused solely on riverine flooding were challenged by sudden surface water inundation driven by rainfall intensity rather than river height alone.

Repeated Storm Impacts and Compounding Disruption

Successive storm events reduced recovery windows between incidents. Emergency management systems designed for isolated events were stretched by repeated activations, reinforcing the need for resilience-based planning rather than single-event response.

Precinct-Wide Interdependence

Building operations were closely tied to external systems including transport, power restoration, drainage and council-managed assets. Storm impacts highlighted the importance of precinct-level coordination and shared situational awareness rather than isolated building responses.

Occupant Welfare and Equity Considerations

Flash flooding and storm disruption disproportionately affected occupants reliant on public transport or ground-level access. Extended closures and uncertainty raised wellbeing concerns, reinforcing the need for clear communication, welfare support and recovery planning.

AE4 Implications for the BBP Emergency Management Maturity Framework

Governance

Severe storm and flash flooding risk benefits from clear decision authority for early shutdowns, evacuations and service isolation. Because storm-driven emergencies can escalate rapidly and recur over time, executive visibility supports integration of these risks into broader resilience and business continuity decision-making.

Planning

Emergency plans can be strengthened by explicitly addressing severe storm and flash flooding scenarios, including protection of critical infrastructure, staged shutdown and re-entry procedures, coordination with storm and flood warnings, and continuity arrangements where access is lost with little notice.

Training

Preparedness can be enhanced by training staff and contractors to recognise storm and flash flooding indicators, understand safe shutdown processes and make decisions under rapidly changing conditions, beyond standard evacuation scenarios.

Exercising

Including severe storm and flash flooding scenarios alongside fire and security incidents in exercises can help test communication pathways, remote or altered operations, and extended recovery and re-occupation processes.

Collaboration

Effective storm and flood response relies on strong relationships with SES, councils, utilities and neighbouring buildings. Shared understanding of stormwater behaviour, flood triggers and responsibilities supports coordinated precinct responses.

Continuous Improvement

Repeated storm events provide opportunities to capture lessons learned and embed them into emergency plans, asset protection strategies and longer-term resilience and capital planning.

AE5 Conclusion

The Parramatta severe storm and flash flooding events demonstrate how climate-driven weather systems are reshaping the emergency management environment for commercial buildings. Storm impacts extend beyond gradual inundation to include rapid-onset flash flooding, access loss, operational disruption and prolonged recovery.

For BBP, this case study reinforces the importance of a maturity framework that addresses storm-driven hazards, supports rapid decision-making under uncertainty, promotes precinct-level coordination and enables buildings to contribute to broader community resilience. It illustrates why emergency management capability must evolve beyond compliance toward integrated, forward-looking resilience in metropolitan precincts.

AE6 Resource links used:

<https://www.cityofparramatta.nsw.gov.au/files/assets/public/v/1/publications/flood-studies/parramatta-river/parramatta-river-flood-study-report.pdf>

https://www.bom.gov.au/nsw/flood/rain_river.shtml

<https://www.nsw.gov.au/floods>

<https://insurancecouncil.com.au/news-hub/current-catastrophes/>

<https://insurancecouncil.com.au/news-hub/current-catastrophes/annual-catastrophe-reporting/>

<https://www.abc.net.au/news/topic/floods>

<https://www.ses.nsw.gov.au/floods>

Appendix F Good–Better–Best Capability Tables

FA AS 3745:2010 Emergency Planning in Facilities Table

AS 3745:2010 - Emergency Planning in Facilities

Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Clauses 2–5: Establishment of EPC and ECO; defined roles, responsibilities, and documentation.	EPC/ECO appointed.	EPC meets regularly with records.	EPC/ECO integrated into corporate governance with senior oversight.
Planning	Clauses 5–7: Conduct risk assessment; develop and maintain emergency plans; display evacuation diagrams.	Basic plan exists.	Reviewed annually and after incidents.	Integrated with business continuity and city-level plans.
Training	Clauses 6.3 & 7.2; Appendix D: Provide training for EPC, ECO, and occupants; maintain training records.	Annual training provided.	Scenario-based training for all roles.	Blended learning with effectiveness evaluation.
Exercising	Clause 7.3; Appendix E: Conduct annual evacuation drills; evaluate and document outcomes.	Annual drill conducted.	Varied scenarios with tenant participation	Multi-agency drills with debriefs and lessons logged.
Collaboration	Clauses 2.3 & 4.6: Consult with management, tenants, and emergency services on plans and readiness.	Basic contact maintained.	Regular meetings and updates.	Integrated planning and exercising with responders and precincts.
Continuous Improvement	Clause 8; Appendix F: Review and update plans after incidents; maintain version control and lessons learned.	Reviewed post-incident.	Annual reviews and evidence of updates.	Continuous improvement culture embedded across sites.

FB ISO 22301 – Business Continuity Management Table

ISO 22301 - Business Continuity Management				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Clauses 5 & 6: Leadership, roles, responsibilities, and objectives; establishment of a Business Continuity Policy.	Management acknowledges policy and responsibilities.	Defined roles, oversight meetings, and reporting structure in place.	Executive-level ownership with continuity metrics embedded in governance and risk frameworks.
Planning	Clauses 6 & 8.2–8.4: Business Impact Analysis (BIA), risk assessment, and development of continuity strategies and plans.	Risks and impacts identified; basic plans developed.	Regularly updated BIAs and risk assessments linked to continuity actions.	Fully integrated planning aligned with strategic and operational objectives.
Training	Clauses 7.2–7.4: Ensure competence, awareness, and communication regarding continuity and emergency responsibilities.	Basic training and awareness provided for key roles.	Structured competency framework and regular refreshers implemented.	Continuous training program embedded with evaluation and feedback loops.
Exercising	Clauses 8.5 & 9.1: Establish and implement an exercising and testing program; evaluate performance and improvements.	Annual testing of core plans conducted.	Multi-scenario exercises including external stakeholders.	Evidence-based testing program with measurable objectives and tracked improvements.
Collaboration	Clauses 4.2, 7.4, 8.4.3: Identify stakeholders, establish communication protocols, and collaborate with internal and external parties.	Stakeholders identified; ad-hoc communication.	Regular liaison and plan sharing with key partners.	Formal collaboration agreements, joint exercises, and shared response frameworks established.
Continuous Improvement	Clauses 9 & 10: Conduct audits, management reviews, and continual improvement based on lessons learned and corrective actions.	Reviews conducted after incidents.	Scheduled audits and management reviews performed.	Continuous monitoring with performance trends, shared lessons, and documented improvements across sites.

FC FEMA CPG 101 – Emergency Operations Planning Table

FEMA CPG 101 – Emergency operations planning.				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Ch.1–2: Establish Emergency Planning Team (EPT), assign executive sponsorship, define authorities, roles, and responsibilities.	Planning lead identified and basic responsibilities assigned.	Formal planning team with charter and regular meetings established.	Senior management oversight; planning embedded in governance policy.
Planning	Ch.3–5: Follow FEMA’s six-step planning process; conduct hazard identification and risk assessment (HIRA); develop comprehensive EOP with annexes.	Basic emergency plan written using templates; key risks noted.	Plans include annexes for major hazards and are reviewed annually.	Fully integrated plan aligned with local and regional frameworks; updated annually with risk data.
Training	Ch.6 & App. E: Provide training for all personnel on EOP roles; maintain records; incorporate lessons from exercises.	Basic awareness training delivered to staff.	Role-specific and scenario-based training delivered annually.	Competency-based training program evaluated and tied to performance metrics.
Exercising	Ch.6: Establish exercise program using HSEEP methodology; conduct annual exercises; track corrective actions and improvements.	Annual tabletop or evacuation drill conducted.	Exercises include multiple hazards and key partners with documented outcomes.	Multi-agency, full-scale exercises with tracked corrective actions to closure.
Collaboration	Ch.2 & 5: Involve government, private sector, NGOs, tenants, and community; establish liaison with local emergency services.	Stakeholders identified and contacted as needed.	Regular collaboration meetings and information exchanges held.	Shared or joint EOPs developed with formal agreements and joint command protocols.
Continuous Improvement	Ch.6–7: Maintain and update plans through evaluations; capture post-incident lessons; manage improvement logs and version control.	Plans reviewed only after major incidents.	Scheduled annual updates and documented lessons learned implemented.	Continuous improvement system embedded with cross-site learning and trend analysis.

FD AIDR Emergency Planning Handbook (2018) Table

AIDR Emergency Planning Handbook (2018)				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Section 2: Define governance, accountability, and coordination structures; ensure executive endorsement and resourcing.	Roles and responsibilities identified; limited oversight of planning activities.	Formal governance framework with planning lead and meeting schedule in place.	Executive-level ownership of emergency planning with governance embedded in policy.
Planning	Section 3: Apply the Plan–Do–Check–Act cycle; conduct risk and vulnerability assessments; integrate prevention, preparedness, response, and recovery (PPRR).	Basic plan developed covering immediate response procedures.	Plans developed through risk assessment and PPRR approach, reviewed annually.	Integrated and risk-informed planning aligned with local/state frameworks and organisational strategy.
Training	Section 4: Build capability through training, education, and knowledge sharing; promote learning culture across stakeholders.	Basic induction or awareness training delivered to key personnel.	Regular training and refresher sessions held for planners and wardens.	Continuous learning program embedded with evaluation and improvement tracking.
Exercising	Section 5: Validate plans through regular exercises and debriefs; ensure exercises test both response and recovery arrangements.	Annual exercise conducted with basic review of outcomes.	Exercises include multiple hazards and functional components; lessons documented.	Multi-agency, full-scale exercises with external observers and validated improvements.
Collaboration	Section 2.4: Encourage inclusive planning with agencies, community, and private sector; promote shared responsibility for resilience.	Stakeholders identified and occasionally consulted.	Regular collaboration meetings and information sharing across partners.	Collaborative, community-inclusive planning embedded with shared ownership of risk.
Continuous Improvement	Section 5: Review and evaluate plans post-incident; capture lessons and implement continuous improvement based on evidence.	Plans reviewed after major incidents or annually as required.	Systematic post-incident reviews and recorded improvement actions implemented.	Continuous improvement system embedded with evidence tracking, shared lessons, and innovation in planning.

FE Sydney CBD Safety Plan Table

Sydney CBD Safety Sub Plan				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Sections 1.5–2.2: Define command, control, and coordination framework; NSW Police is the Combat Agency; establish internal governance consistent with the Sub Plan.	Basic awareness of CBD Safety Sub Plan; ad hoc coordination with NSW Police or City of Sydney.	Formal governance structure aligned with CBD command framework; defined liaison roles with NSW Police and City of Sydney.	Governance fully integrated with CBD Safety Sub Plan framework; active participation in multi-agency planning and reviews.
Planning	Sections 3–4: Align organisational emergency plans with the CBD Sub Plan; include CBD-specific risks; link to NSW emergency management arrangements.	Organisational plan references CBD Sub Plan in general terms; limited site-specific risk detail.	Emergency plan aligns with CBD Sub Plan and includes local risks (e.g. transport, utilities, crowd management).	Fully integrated, risk-informed planning aligned with city-level command and control; clear triggers and escalation procedures.
Training	Section 6: Conduct training for staff on CBD coordination, communication protocols, and Sub Plan activation; ensure awareness across all facility levels.	Basic induction training provided; awareness of evacuation procedures and emergency contacts.	Structured training and refresher sessions referencing Sub Plan protocols and communication channels.	Ongoing multi-level training program including CBD-specific modules; evaluation and improvement tracked across sites.
Exercising	Section 6.3: Participate in multi-agency exercises led by NSW Police and City of Sydney; test activation and communication procedures.	Internal drills held annually with limited external participation.	Participation in precinct-level or citywide drills; lessons documented and reviewed internally.	Regular participation in citywide multi-agency exercises with after-action reports shared across portfolios.
Collaboration	Section 5: Maintain coordination with government, emergency services, and private sector; engage in CitySafe, Alert NSW, and information-sharing platforms.	Basic contact maintained with City of Sydney or NSW Police; reactive engagement during incidents.	Regular communication and information exchange with CitySafe or emergency services; joint planning meetings.	Formal collaboration agreements with City of Sydney and emergency agencies; joint communication systems and shared situational awareness tools.
Continuous Improvement	Sections 6.4 & 7: Conduct post-incident debriefs and evaluations; capture lessons and update plans in line with citywide learnings.	Reviews conducted after major incidents with minimal documentation of outcomes.	Scheduled reviews and debriefs after drills and activations; documented corrective actions implemented.	Continuous improvement embedded through participation in CBD-wide after-action reviews, version control, and performance tracking.

FF WELL Building Standard Table

WELL Building Standard				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	WELL C15 requires formal emergency preparedness policies and clearly assigned responsibilities. Documentation of emergency procedures must be available to occupants.	Basic emergency policy exists; roles broadly defined but not consistently applied.	Clear roles assigned (including alternates), WELL-aligned emergency policy maintained and reviewed.	Emergency governance integrated with organisation-wide risk strategy; leadership champions emergency capability; building participates in precinct governance.
Planning	WELL requires documented emergency action plans covering evacuation, shelter-in-place, communication methods, first aid access, and occupant needs (C14 & C15).	Plans in place and meet minimum WELL-aligned requirements (evac routes, contacts, equipment).	Plans regularly updated, incorporate vulnerable occupants, and integrate IAQ, comfort & wellbeing factors.	Plans fully coordinated with precinct agencies; building uses data-driven risk assessments; WELL requirements embedded into operational planning.
Training	WELL requires occupant-facing signage, first-aid/AED awareness, and staff training on emergency procedures.	Basic emergency training provided annually; occupants aware of signage and exits.	Competency-based training delivered; AED/first aid familiarisation; training adapted to tenant needs.	Scenario-based training; multi-tenant coordination; trauma-informed wellbeing training; cross-building participation.
Exercising	WELL encourages regular drills/testing of emergency systems (evacuation, communication, equipment).	Evacuation drills conducted annually; equipment tested.	Multiple drill types conducted (evac, shelter-in-place, medical response).	Multi-agency, multi-tenant exercises; evaluation cycles fully embedded; WELL-aligned continuous improvement loop.
Collaboration	WELL encourages coordination with emergency services and accessibility planning.	Basic engagement (info provided when requested).	Regular contact; emergency plans shared; responders familiar with building access.	Building embedded in precinct coordination groups; shared planning with tenants, neighbours, emergency services.
Continuous Improvement	WELL requires review of emergency plans, logs of equipment checks, and updates after incidents.	Plans reviewed annually; equipment checks recorded.	Lessons from drills incorporated; WELL monitoring data informs improvements.	Continuous improvement culture; digital monitoring; cross-building lessons shared; WELL recertification drives ongoing uplift.

FG Green Star Performance Table

Green Star Performance				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Green Star requires risk governance frameworks, resilience leadership, documented operational policies and safety management.	Emergency procedures exist and meet compliance; responsibilities assigned.	Resilience governance documented; leadership oversight; performance tracking.	Governance integrated across organisation & precinct; resilience embedded in corporate strategy; third-party verification.
Planning	Green Star mandates risk and vulnerability assessments, climate hazard planning, continuity considerations, and accessibility planning.	Basic risk assessments conducted; emergency plans documented.	Risks assessed across climate, systems, and operations; adaptation measures implemented.	Fully integrated risk models; precinct-level planning; continuous scenario-based updates; Green Star-aligned resilience strategy.
Training	Green Star encourages competency training for operating staff and occupant education programs.	Basic staff emergency training completed.	Competency-based training for operations team; tenant education programs delivered.	Advanced resilience training; multi-tenant joint sessions; ongoing capability program aligned to Green Star improvement cycle.
Exercising	Green Star credits align with system testing, performance checks, and evidence of drills.	Annual evacuation or system testing occurs.	Multiple system tests and scenario exercises conducted; issues tracked.	Integrated exercises across precinct; resilience stress-testing; third-party validation; results inform Green Star re-performance.
Collaboration	Green Star Resilience credits promote stakeholder engagement with city agencies, neighbouring assets, and the community.	Minimal external engagement beyond compliance.	Regular engagement with local authorities and occupants; shared planning with tenants.	Precinct-level collaboration; co-designed resilience measures; active partnerships with emergency services & local government.
Continuous Improvement	Green Star requires annual performance audits, improvement tracking, and ongoing policy updates.	Annual review of plans and performance metrics.	Improvements implemented proactively; annual Green Star reporting informs updates.	Continuous improvement culture; digital monitoring; resilience KPIs; cross-portfolio learning and best-practice sharing.

FH GRESB Table

GRESB				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	GRESB requires formal risk management frameworks, policies, roles, and reporting structures.	Organisation has basic emergency or risk-related policies; roles loosely defined.	Clear governance documented; emergency roles assigned; regular reporting to senior leadership.	Integrated governance system; board-level oversight; emergency management embedded in ESG strategy; annual public reporting.
Planning	GRESB Resilience Module requires identification of material risks (including climate, physical, operational) and documented mitigation strategies.	Emergency plans exist and address common emergencies (fire, evacuation).	Comprehensive risk assessment completed (including climate and social risks); emergency plans updated regularly.	Scenario-based planning across portfolios; integration with precinct/city frameworks; continuous adaptive planning based on emerging threats.
Training	GRESB encourages capacity building for staff, contractors, and stakeholders around risk and resilience.	Staff receive basic compliance-level emergency training.	Staff, contractors, and some tenants trained in multiple emergency scenarios.	Whole-of-organisation capability program; resilience and emergency readiness training integrated into annual ESG learning pathways.
Exercising	GRESB values demonstration of preparedness through drills, performance checks, and assurance activities.	Annual evacuation drills conducted; some testing of equipment.	Multiple drill types (evacuation, communications, scenario tests) performed; issues tracked.	Robust exercising program including cross-building and cross-agency simulations; third-party validation; results fed into improvement cycles.
Collaboration	GRESB emphasises stakeholder engagement, external partnerships, and communication across supply chains.	Limited engagement with external emergency services or stakeholders.	Regular engagement with tenants, contractors, and local emergency services.	Precinct-level resilience partnerships; participation in city programs; collaboration reported in GRESB submissions and ESG disclosures.
Continuous Improvement	GRESB requires measurement of performance, corrective actions, resilience enhancements, and long-term improvement tracking.	Plans reviewed annually; basic lessons learned captured informally.	Systematic review process; corrective actions tracked; emergency performance indicators monitored.	Evidence-based resilience improvements; digital monitoring; cross-portfolio learning; continuous assurance; improvements documented for GRESB verification.

FI NEMA Table

NEMA				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Climate and disaster risk should be embedded into organisational governance. Senior leaders should be aware of exposure to climate-related hazards, with clear risk ownership and alignment to ESG and resilience expectations.	The organisation acknowledges exposure to hazards such as extreme heat, storms, floods and bushfire smoke within its risk register.	Climate-related emergency risks are assigned to specific governance roles, with visible oversight and alignment to ESG reporting processes.	Climate resilience is fully embedded in organisational governance, with regular review cycles, portfolio-wide risk visibility and consideration of national resilience priorities.
Planning	Emergency planning should consider multi-hazard and climate-informed scenarios, account for cascading impacts and incorporate the needs of diverse occupants. Plans should reflect national resilience principles and local CBD-level risks.	Emergency plans reference major climate hazards in a general way, ensuring basic preparedness for heat, flood, storm or smoke events.	Plans incorporate detailed multi-hazard scenarios with documented mitigation measures and triggers for activation. Climate-related risks are clearly integrated into procedures.	Planning is fully climate-informed, integrating organisational continuity arrangements, ESG expectations, the Sydney CBD Safety Sub Plan, and broader precinct-wide risk considerations.
Training	Training programs should build capability to respond to climate-related emergencies, focusing on evolving conditions and occupant wellbeing.	Staff are aware of appropriate actions during climate-related events such as heatwaves, storms, smoke or flood access issues.	Training includes scenario-based sessions that address climate hazards and integrate communication and occupant support needs.	Training covers multiple climate-related scenarios, is coordinated across teams and tenants, and includes preparedness for long-duration events such as sustained heatwaves or smoke conditions.
Exercising	Exercises should test climate-related scenarios, validate decision-making pathways and strengthen coordination across teams and stakeholders.	Exercises are limited to standard annual fire evacuations.	Exercises begin to incorporate climate-related challenges such as loss of access due to flooding or building system strain during heat events.	Multi-hazard exercises are conducted with external partners, including the City of Sydney and neighbouring buildings, and examine complex, compounding climate scenarios.
Collaboration	Collaboration should support shared situational awareness and coordinated responses to climate-related emergencies within the precinct.	Engagement with neighbouring buildings or authorities occurs informally during environmental events.	Planned engagement is established with the City of Sydney, utilities or neighbouring facilities for climate-related event coordination.	Collaboration is formalised across the precinct, including shared communication approaches and mutual support arrangements such as designating accessible safe areas for heat or smoke events.
Continuous Improvement	Continuous improvement processes should incorporate lessons from climate-related incidents, review emerging national guidance and maintain up-to-date risk assessments.	Reviews of climate-related impacts occur only after major disruptions and updates are infrequent.	Lessons from climate-related events are documented, applied and reflected in revised risk registers and plans.	Continuous improvement is proactive, incorporating trend analysis, regular updates, cross-portfolio learning and alignment with national resilience guidance.

FJ ISO 31000 Risk Management Guidelines Table

ISO 31000 - Risk Management Guidelines				
Maturity Domain	Key Clauses & Actions	Maturity Indicators Good	Maturity Indicators Better	Maturity Indicators Best
Governance	Risk management is integrated into organisational governance, with leadership responsible for setting direction and ensuring accountability for emergency-related risks.	Emergency risks are recorded and monitored at a basic level.	Governance roles for emergency risk are defined and actively reviewed.	Emergency management is embedded into enterprise risk and ESG governance with portfolio oversight.
Planning	Risk assessments should inform emergency planning, including identification of vulnerabilities, evaluation of controls and selection of effective treatments.	Planning acknowledges key risks but remains compliance-driven.	Planning is guided by structured risk assessment and scenario analysis.	Planning is fully risk-informed, reflecting dynamic risk, interdependencies and continuity requirements.
Training	Organisational capability should support risk-based decision-making and awareness of emergency risks.	Staff understand basic emergency procedures.	Staff are trained in applying risk-informed decision processes	Risk-based thinking is embedded across teams, supporting adaptive responses in complex events.
Exercising	Controls should be monitored and tested to confirm their effectiveness in managing priority risks.	Exercises test standard procedures.	Exercises are designed around priority risks and intended to test specific controls.	Exercises validate complex risk treatments and integrate lessons into continuous improvement.
Collaboration	Risk management requires communication and consultation with relevant stakeholders to ensure shared understanding of risks and controls.	Communication about risks is mostly internal.	Collaboration includes structured engagement with tenants and key partners.	Collaboration is proactive and includes neighbouring buildings, city agencies and external stakeholders.
Continuous Improvement	Regular monitoring, review and learning ensure risk controls remain effective and updated.	Reviews occur after incidents.	Lessons and reassessments inform updates to plans and controls.	A proactive improvement cycle uses trend analysis and shared learning across portfolios.

