

# RISK MANAGEMENT FRAMEWORK

## Appendix A

### Purpose

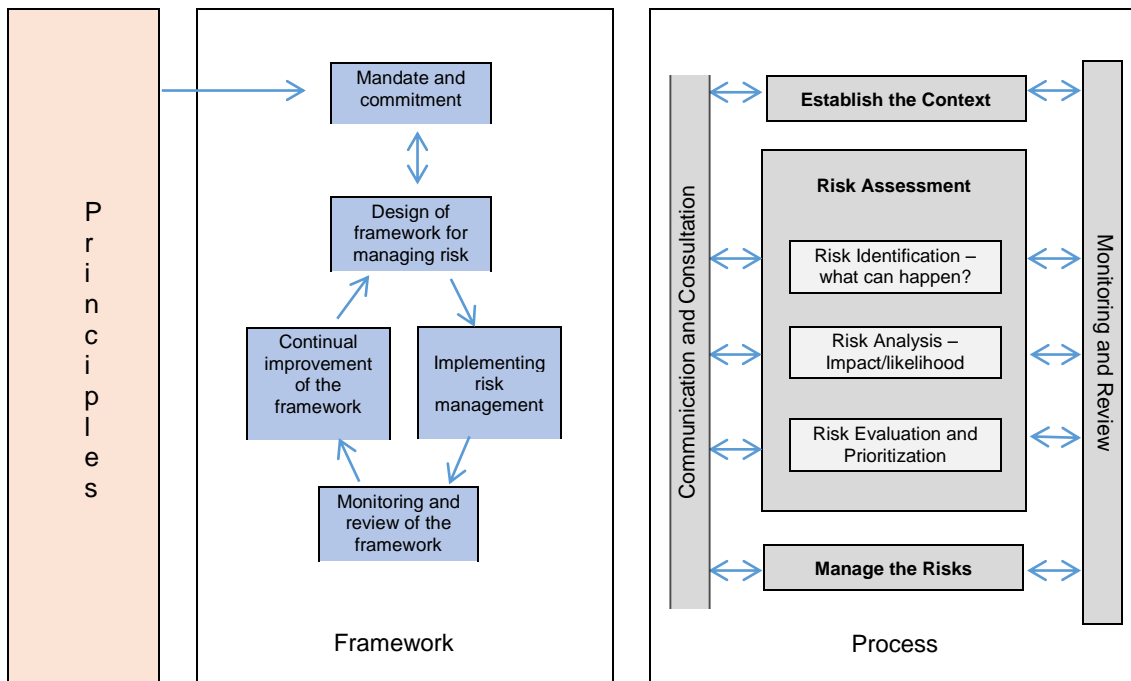
This Risk Framework has been developed in support of the Medicine Hat College Risk Management Policy and Risk Appetite Statement and is intended for use by the Medicine Hat College community to ensure consistent application of risk management processes to the wide range of activities undertaken by the College.

### Overview

Medicine Hat College will use the CAN/CSA-ISO 31000 Standards as a guide to develop and implement its Enterprise Risk Management (ERM) Framework and processes to oversee and manage risk and opportunities for the institution. The adoption of consistent processes within a comprehensive framework can help to ensure that risk is managed effectively, efficiently and coherently across the College.

According to the Standards, the relationship between the principles for managing risk, the framework in which it occurs and the risk management process can be summarized as follows:

Figure 1



When implemented and maintained according to this International Standard, the management of risk enables the institution to improve the identification of opportunities and threats, comply with relevant legal and regulatory requirements and establish a reliable basis for decision-making and accountability.

## **Risk Management Principles**

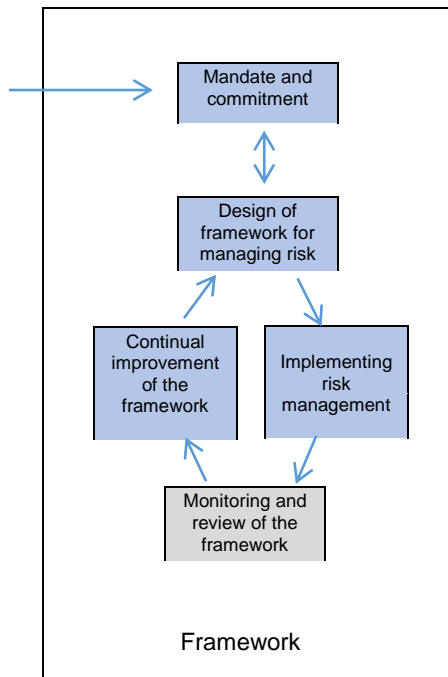
The College's Risk Management Framework is based on the following key principles that need to be followed in order for risk management to be effective.

- 1. Risk management is a core component of effective board governance.**  
Managing risk is a principal component of effective board governance and builds upon transparent and accountable processes consistent with sound business practices. Risk management is applied to the development and implementation of policy, plans and future directions of the College.
- 2. Risk management creates and protects value.**  
Risk management is aligned with the mission and strategies of the College and seeks to create and protect value by contributing to the demonstrable achievement of objectives and the improvement of performance. Clarifying and reaffirming the value of risk management at all levels will help to sustain institution-wide support and engagement and allow the College to be dynamic and responsive to change.
- 3. Risk management is an integral part of all institutional processes.**  
Risk management is part of the responsibilities of management and includes a program of monitoring and reporting that is fully integrated with the College's processes and activities.
- 4. Risk management is part of decision making.**  
Risk management will enable decision makers to make informed choices, prioritize actions and distinguish among alternative courses of action. All levels should ensure work behaviours encompass informed decisions based on a reasonable analysis of foreseeable risks, opportunities and their associated impacts on college strategies and the attainment of strategic objectives.
- 5. Risk management is transparent and inclusive.**  
Appropriate and timely involvement of all stakeholders will ensure that risk management remains relevant, representative, and consistent with institutional values in order to build communication and trust between decision makers and stakeholders.
- 6. Risk management facilitates continual improvement.**  
The College will develop a risk management framework and process that are continuous, evolving, and responsive to changing circumstances to facilitate continuous improvement.

## Risk Management Framework

The Risk Management Framework sets out the general mandate and commitment, overview and guiding principles, and roles and responsibilities in order to integrate the process for managing risk into the College's overall governance, strategy and planning, management, reporting processes, policies, values and culture.

Figure 2



### Mandate and Commitment

Medicine Hat College is committed to managing risk in accordance with the established process and will continually review and modify the risk process according to changing strategies and objectives. The College's senior management team is committed to fostering an environment that creates and preserves value. This includes, but is not limited to the following:

- define and endorse the risk management policy;
- ensure that the institution's culture and risk management policy are aligned;
- align risk management objectives with the objectives and strategies of the institution; ensure legal and regulatory compliance;
- assign accountabilities and responsibilities at appropriate levels;
- ensure that the necessary resources are allocated to risk management;
- communicate the benefit of risk management to all stakeholders; and
- ensure that the framework for managing risk continues to remain appropriate.

The College's mandate and commitment to manage risk provides the foundation on which all other risk management activity occurs. Employees shall incorporate risk management into decision-making and key business and operational processes as set out in this framework.

### **Design of Framework**

The College has developed processes that enable the institution to: understand its environmental context; develop and maintain its risk policy; integrate risk management into organizational processes; establish accountability for managing risk; allocate appropriate resources to managing risk; and communicate and report appropriately across the institution as well as to external stakeholders.

### ***Risk Appetite***

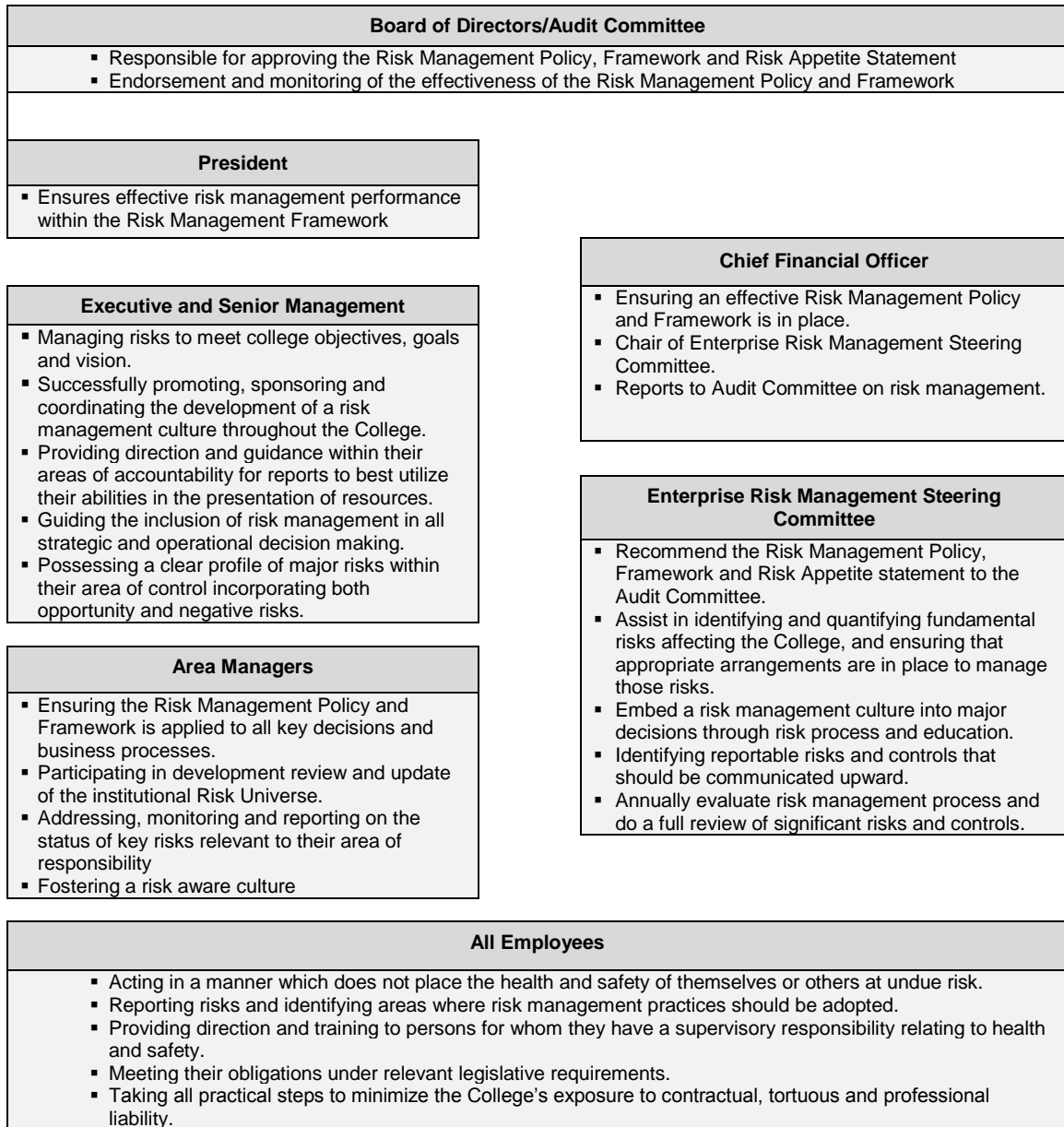
Risk appetite is a reflection of the College's approach to risk management and a key element of the framework. Defining the College's risk appetite and aligning this with the strategies and objectives of the institution is fundamental to risk management

The College's Statement of Risk Appetite (Appendix C) is a formal expression of the amount and type of risk we are willing to accept to achieve strategic goals and objectives. The statement should be used to guide employees in their actions and ability to accept and manage risk and forms the basis for the College's risk rating criteria identified in Schedule 1.

### ***Roles and Responsibilities***

The College will ensure that there is accountability, authority and appropriate competence for managing risk and ensuring the adequacy, effectiveness and efficiency of any controls as outlined in Figure 3 on the following page.

Figure 3



**Implementing risk management**

Through a risk management plan, the College has implemented risk management processes at all relevant levels and functions across the institution. The framework is applied to all key decisions and business processes in order to add value to the institution, comply with legal and regulatory requirements and help the College attain strategic and operational objectives.

### **Monitoring, review and continual improvement**

The College will review the Risk Management Policy and Framework annually to confirm its continuing suitability, adequacy and effectiveness.

In an effort to ensure the approach remains valuable and helpful, the framework and assessment process will be continuously improved through feedback from stakeholders. Both formal and informal mechanisms will be used to identify, capture and share better practices in managing risk across the institution.

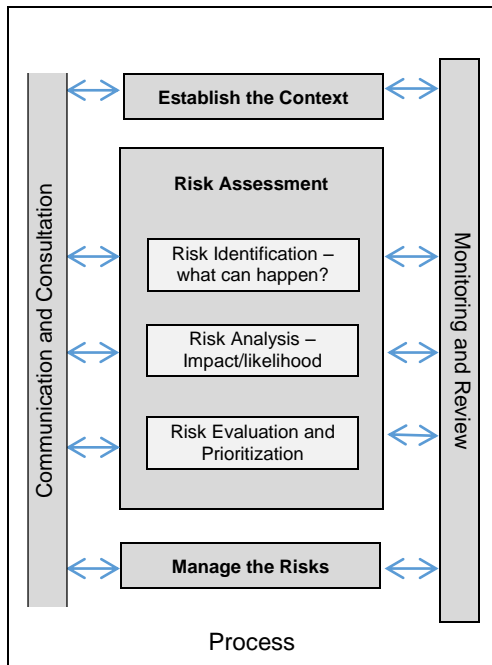
### **Risk Management Process**

The risk management process shall be embedded in the cultures and practices and tailored to the business processes of the institution. Medicine Hat College will manage risk by identifying and analyzing risks and then evaluate whether the risk should be modified by risk treatment in order to satisfy defined criteria.

To implement the process, the three components of establishing the context, risk assessment and risk treatment should be performed in sequence. Risk communication and consultation as well as monitoring and review are performed continuously in an effort to ensure that priority risks are treated and stakeholders are engaged appropriately.

Figure 4 forms the basis for evaluating and enhancing risk management at the College and has been used as a guideline to define the College's risk assessment process as shown in Schedule 1.

Figure 4



## Definitions

For the purpose of this document, the following definitions apply.

**Control:** Any process, policy, device, practice, or other actions which modify risk.

**Impact:** The outcome of an event affecting objectives.

**Inherent Risk:** The risk without considering any mitigating controls.

**Likelihood:** The chance of an event happening.

**Residual Risk:** The risk remaining after risk treatment.

**Risk:** The effect of uncertainty on objectives. Risk is measured in terms of likelihood and impact.

**Risk Appetite:** The amount and type of risk that an organization is prepared to pursue, retain or take.

**Risk Criteria:** The terms of reference against which the significance of a risk is evaluated and rated.

**Risk Management:** Coordinated activities to advise and guide an organization with regard to risk.

**Risk Register:** A comprehensive list of risks identifying the risk description, potential consequences, likelihood and impact levels, risk score, controls, risk owner and action plan.

**Risk Tolerance:** The institution's readiness to bear the risk after risk treatment in order to achieve objectives.

**Risk Treatment:** The process to modify risk by removing the risk source, changing the likelihood and/or changing the consequence.

**Risk Universe:** All risks that can affect the College.

### Schedule 1 - Risk Management Process and Tools

The first step in the risk assessment process is to define all the risks that can affect the College into an illustrative map known as the risk universe. This will ensure that the various risk areas and associated key business risks have been fully captured and allow for prioritization following review.

Once risks are identified, they are evaluated using a qualitative rating of the likelihood of the event occurring and the scale of the possible impact to the College. They are then analyzed by combining the impact and likelihood to produce a severity rating that can be placed in the matrix that follows (Figure 4). This form of evaluation provides a good graphical representation of how serious the risk is or where it lies within a group of risks and also provides the analysis required to determine what risks are accepted or the extent of risk treatment.

The College will use the following measurement tools in evaluating risk.

Figure 1: Likelihood Measure

Likelihood Measure			
The probability of the risk event occurring			
Score	Likelihood	Meaning	Probability of Occurance
1	Improbable, rare	Rare or improbable based on: <ul style="list-style-type: none"> <li>▪ The strength of existing policies, procedures or plans;</li> <li>▪ Healthy institutional culture; and or</li> <li>▪ Known training competencies</li> </ul>	Less than once every 5 years
2	Unlikely	Unlikely to occur based on: <ul style="list-style-type: none"> <li>▪ The strength of existing policies, procedures or plans;</li> <li>▪ Acceptable institutional culture; and or</li> <li>▪ Known training competencies</li> </ul>	Will occur once every 2 to 5 years
3	Possible	Possible based on: <ul style="list-style-type: none"> <li>▪ Weakness or absence of existing policies, procedures or plans;</li> <li>▪ Some concern with institutional culture; and or</li> <li>▪ Inadequate breadth or depth in training competencies</li> </ul>	Will occur once every 1 to 2 years
4	Likely	Likely to occur based on: <ul style="list-style-type: none"> <li>▪ Occurrence in the past</li> <li>▪ Weakness or absence of existing policies, procedures of plans;</li> <li>▪ Concerns with institutional culture; and or</li> <li>▪ Inadequate breadth or depth in training competencies compared to industry standards</li> </ul>	Will occur yearly or at least once per year
5	Almost Certain	Certain to occur based on: <ul style="list-style-type: none"> <li>▪ Occurrence in the past</li> <li>▪ Weakness or absence of existing policies, procedures or plans;</li> <li>▪ Deficiency in institutional culture, and or</li> <li>▪ Inadequate breadth or depth in training competencies compared to industry standards.</li> </ul>	Will occur twice per year or more



Figure 2: Impact Measure

If a risk falls into several categories, it is always placed in the category with the highest risk level. For example, if an activity could result in a major reputation impact and a significant financial impact, it should be considered a major impact.

Impact Measure					
Degree of severity of the consequences should the risk occur					
Impact Levels	People	Academic and Business Development	Financial Legal Exposure	Operational	Reputation
Insignificant 1	<ul style="list-style-type: none"> <li>▪ Very limited number of students, employees or public affected</li> <li>▪ Exceptional morals and loyalty</li> </ul>	<ul style="list-style-type: none"> <li>▪ Little or no impact to program quality or access</li> </ul>	<ul style="list-style-type: none"> <li>▪ Very limited loss of assets, replacement costs, funding or replacement &lt;\$5000</li> <li>▪ Litigation against MHC &lt;\$5000</li> </ul>	<ul style="list-style-type: none"> <li>▪ Negligible effects</li> <li>▪ Very minor disruptions</li> <li>▪ Very minor overruns</li> <li>▪ Very minor loss of data</li> <li>▪ Minor delays in replacing staff</li> </ul>	<ul style="list-style-type: none"> <li>▪ Very little or no impact on internal or external reputation.</li> <li>▪ Very little or no impact on student and/or community satisfaction.</li> </ul>
Minor 2	<ul style="list-style-type: none"> <li>▪ Limited number of students, employees or public affected</li> <li>▪ Good morals and loyalty</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minimum or no impact to program quality or access</li> <li>▪ Some impact to efficiency</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minor loss of assets, replacement costs, funding or revenues &gt;\$5000 and &lt;\$100,000</li> <li>▪ Litigation against MHC &gt;\$5000 and &lt;\$100,000</li> </ul>	<ul style="list-style-type: none"> <li>▪ Normal administrative difficulties</li> <li>▪ Minor disruptions or losses in services, data</li> <li>▪ Short term localized disruptions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minor impact on internal or external reputation.</li> <li>▪ Minor impact on student and/or community satisfaction.</li> <li>▪ Minimal breach of information management and/or privacy.</li> </ul>
Significant 3	<ul style="list-style-type: none"> <li>▪ Moderate number of students, employees or public affected.</li> <li>▪ Average morals and loyalty.</li> <li>▪ Key employees are slow to recruit – replacements available.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact to program access with continued disruptions over several days.</li> <li>▪ Minimal impact on quality, efficiency or effectiveness of programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Significant loss of assets, replacement costs, funding or revenues &gt;\$100,000 and &lt;\$2.5M.</li> <li>▪ Litigation against MHC &gt;\$100,000 and &lt;\$2.5M.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Moderate disruptions of essential services.</li> <li>▪ Some loss of data.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measurable damage to internal or external reputation.</li> <li>▪ Moderate impact on student and/or community satisfaction.</li> <li>▪ Minimal impact on stakeholder relationships.</li> <li>▪ Significant breach of information management and/or privacy.</li> </ul>
Major 4	<ul style="list-style-type: none"> <li>▪ Major number of students, employees or public affected.</li> <li>▪ Low moral and loyalty.</li> <li>▪ Long-term unscheduled absence of key employee(s).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact to program access with continued disruptions over several weeks.</li> <li>▪ Long-term effect on quality, efficiency or effectiveness of programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Major loss of assets, replacement costs, funding or revenues &gt;\$2.5M and &lt;\$10M.</li> <li>▪ Litigation against MHC &gt;\$2.5M and &lt;\$10M.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Major disruptions of essential services with continued disruption of essential services.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measurable damage to internal or external reputation.</li> <li>▪ Major impact on student and/or community satisfaction.</li> <li>▪ Significant and long-term impact on stakeholder relationships.</li> <li>▪ Major breach of information management and/or privacy.</li> </ul>
Critical 5	<ul style="list-style-type: none"> <li>▪ Significant number of students, employees or public affected.</li> <li>▪ Extremely low moral and loyalty.</li> <li>▪ Loss of 2 or more key leaders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact to several program activities with continued disruptions over several weeks.</li> <li>▪ Major and/or long-term effect on quality, efficiency or effectiveness of programs.</li> <li>▪ Major shift in strategy.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extreme loss of assets, replacement costs, funding or revenues &gt;\$10M.</li> <li>▪ Litigation against MHC &gt;\$10M.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extreme and widespread severe disruptions as a result of one or more major system failures with continued disruption over several weeks.</li> <li>▪ Major failure in project delivery expectations.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long lasting damage to internal or external reputation.</li> <li>▪ Major impact on student and/or community satisfaction.</li> <li>▪ Major long-term and/or wide-spread impact on stakeholder relationships.</li> <li>▪ Extreme breach of information management and/or privacy.</li> </ul>

Figure 3: Severity rating table

Once the likelihood and impact of the inherent risk have been determined, the product can be mapped on the risk profile matrix as to the severity of the risk.

Score	Rating	Response
1-2	Zero	Accept risk
3-5	Low	Accept but monitor
6-10	Modest	Manage and monitor
12-15	Moderate	Considerable management required
16-25	High	Extensive management required

Figure 4: Risk Profile Matrix

		Likelihood x Impact					
(-) Decreasing Probability	(+) Increasing	5	5 Low	10 Modest	15 Moderate	20 High	25 High
		4	4 Low	8 Modest	12 Moderate	16 High	20 High
		3	3 Low	6 Modest	9 Modest	12 Moderate	15 Moderate
		2	2 Zero	4 Low	6 Modest	8 Modest	10 Modest
		1	1 Zero	2 Zero	3 Low	4 Low	5 Low
			1	2	3	4	5
			(-) Decreasing		Impact	Increasing (+)	

Once inherent risks have been evaluated, we can assess current mitigation practices to determine the residual risk level. The strength of risk responses and the related value will help determine the extent of mitigation still required. The values are subtracted from the inherent risk score and should reflect the effectiveness of current controls.

Figure 5: Control effectiveness

Effectiveness of Risk Response	Description	Value
Very Strong	The college has a strong influence over outcomes. Board approved risk management policies have been implemented. On-going measurement and monitoring of results is conducted including regular reports to the Board.	8
Strong	Critical, but not all key risks are known. Controls in place provide the college a higher level of certainty, although not to all or every potential exposure.	6
Moderate	Controls in place provide the college a reasonable certainty of control, although they may not afford management knowledge of all potential exposures.	4
Weak	While controls are in place, they are insufficient to prevent or mitigate this scenario.	2
Uncontrollable	Little or no measures can be implemented. Risk is generally outside the control or influence of the college. No policies have been implemented and no on-going reporting is provided.	0

To prioritize risk response, both inherent and residual risk severity levels can be mapped out on the risk profile matrix or the “heat map”.

Figure 6: Risk Heat Map

