



RISK MANAGEMENT PLAN

December 2024

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Document Information

Title	<i>Risk Management Plan</i>
Product Number	<i>IAMF 010a</i>
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Description	<i>This Risk Management Plan aims to improve the effectiveness of risk management across the highway infrastructure assets.</i>

Document History

<i>Version No.</i>	<i>Status</i>	<i>Author</i>	<i>Date</i>	<i>Changes from Previous Version</i>	<i>Checked and Approved</i>	<i>Date</i>
<i>01</i>	<i>Draft</i>	<i>SM/JW</i>	<i>Aug 23</i>			
<i>1.01</i>	<i>Final</i>	<i>SM/JW</i>	<i>Dec 23</i>	<i>Cabinet</i>	<i>PG</i>	<i>Dec 23</i>
<i>2.01</i>	<i>Final</i>	<i>SP</i>	<i>Dec 24</i>	<i>1st Yearly review</i>	<i>PG/AR</i>	<i>Dec 24</i>

1. Introduction

This Risk Management Plan aims to improve the effectiveness of risk management across the highway infrastructure assets. Effective risk management allows us to:

- have increased confidence in achieving our priorities and outcomes
- constrain threats to acceptable levels
- take informed decisions about exploiting opportunities
- ensure that we get the right balance between rewards and risks
- improve partnership working arrangements and corporate governance

Ultimately, effective risk management will help to maximise opportunities and minimise the impact of the risks faced, thereby improving ability to deliver priorities, improve outcomes for residents and mitigating legal action and financial claims against the council and damage to its reputation. This Risk Management Plan provides a comprehensive framework and process designed to support officers in ensuring that the Highway Authority can discharge its risk management responsibilities fully, based on a transparent approach to managing :

- risks to the Highway Authority and its reputation
- the risks to the users of the highway
- and those adjacent to the highway's infrastructure

The plan outlines the objectives and benefits of managing risk, describes the responsibilities for risk management and provides an overview of the procedures in place to manage risk successfully.

Risk Management is recognised as an integral element of Corporate Governance and a key contributor to ensuring a robust internal control environment. The management of risk is considered good practice within the public sector. Risk Management can be defined as the culture, process and structure that are directed towards effective management of potential opportunities and threats to the organisation achieving its objectives.

The Highways Team will establish and maintain a systematic framework and process for managing highway, operational, project and partnership risks which will be outcome focussed. This will include assessing risks for likelihood and impact, identifying and allocating responsibility for implementing mitigating controls and receiving assurances to ensure successful management of those risks and that the controls are complied with. The plan affirms the Highway Authority's strategic commitment to building a risk management culture within highways which risks and opportunities are identified and managed effectively. The Council recognises that, in pursuing its strategic objectives, measured risk-taking is both acceptable and appropriate in line with guidance and best practice.

This 'Risk Management Plan' provides details on the principles and processes identified in the Council's Risk Policy. It includes resources which have been designed to assist with the risk management process and to encourage a consistent and comprehensive language and approach to managing risk across the whole Council. The main purpose of this plan and plan is to:

- Ensure a common level of understanding of risk identification assessment and management across the Council through training and regular audit of that application of risk-based processes
- Ensure the process of risk management is developed and managed in a consistent manner
- Encourage the embedding of risk management throughout the Highways and Sustainable Transport Team
- Promote a culture of risk awareness. Leading to an understanding of management, communication, mitigation and acceptance of risk as appropriate

All service providers, partners and stakeholders are expected to play a positive role in ensuring that effective risk management is embedded into the culture and activities of the Council.

What good Risk Management will allow us to do is:

- Create focus towards objectives.
- Help inform and manage change.
- Give flexibility in responding to issues.
- Support innovation
- Improve transparency and justify decisions.
- Inform the budget & MTFP process.
- Identify the appropriate level of controls.
- Share knowledge in controls
- Protect reputations.

2. Definition

The identification, assessment, evaluation of risks and the processes and procedures undertaken to avoid or minimise their impact. Risk Management can be defined as the culture, process and structure that are directed towards effective management of potential opportunities and threats to the organisation achieving its objectives. This includes:

- Identify
- Analyse
- Evaluate
- Control
- Treat
- Communicate
- Monitor
- Review

3. Risk Process – Applying Risk in Managing Highway Infrastructure Assets.

Whilst risk management is a statutory requirement it is not simply a compliance exercise but an indispensable element of good management and corporate governance, which is essentially the way an organisation manages its business, determines strategy and objectives, and goes about achieving its goals.

Risk management will help identify and deal with the key risks facing the Highway Authority in the pursuit of its goals and is essential to its ability to discharge its various functions: as a deliverer and commissioner of public services, a custodian of public funds and a significant employer.

The Risk Management Process outlined within this document should be used as a guide to best practice in managing risks which could impact strategic priorities, operational activities (e.g., delivery of actions identified in team plans) and delivery of projects or programmes.

The Council has well-established risk management approaches in place for Health Safety and Welfare and Business Continuity Management and Emergency Planning. Various mechanisms also exist to manage projects and programmes. This risk management practical guide does not supersede the specific guidance issued in relation to those risk areas but supports it.

The Highway Authority's risk management process for Highway Infrastructure is shown below in Figure 3.1:



Figure 3.1 – Risk Management Process

A step-by-step guide which follows the risk management process. Further advice and assistance on risk management is available from Head of Service for Engineering, Principal Officers for Structures, Planned Maintenance and Reactive Maintenance.

The Council defines Risk as:

‘The chance of something happening that may have an impact on objectives.’

and

Risk Management as:

‘A planned and systematic approach to the identification, evaluation and control of those risks which can threaten the objectives, assets, or financial wellbeing of the Council.’

3.1. Stage 1 – Identify Risk

Risk identification attempts to identify the Highway Authority's exposure to uncertainty. To ensure that key risks are identified the process requires imagination, creativity, ingenuity and wide involvement as well as a methodical framework.

This is the most important step of the process, as it enables us to articulate risks associated to the achievement of our objectives enabling management of these risks in the subsequent stages. There are a wide range of methods available that can be used to identify and understand risks. The method selected will depend upon the type of risk(s) being dealt with.

Risks can be identified in several forums, including:

- A 'brainstorming' session or workshop with the whole management team
- Interviews (LEAN review?)
- Meetings with smaller groups of people (Monthly management team meeting?)
- Questionnaires to participants

Additionally, existing sources of information could help inform this stage. Some examples are listed below:

- Council, directorate or service plans
- Existing risk registers
- Committee reports
- Partners documented or perceived views of risk, for example their own risk registers
- Internal or external research papers or statistical trends
- Risks or issues raised by internal audit or any other external scrutiny body
- Risks identified through budget setting process
- Health & safety risk assessments
- Business continuity risk assessments
- Partnership, programme or project documentation (e.g., business case or project risk register)
- Experience of those running or participating in the risk identification process

It is the responsibility of those identifying risks to decide which sources of information they should consult. This may be one or more of the sources listed above or it could be something else appropriate. What is vital is that this is a group exercise that considers the views of a range of relevant officers for the risk assessment. No one person holds all the risks so involving others will ensure the process is as comprehensive as possible.

It is crucial for risks to be defined properly at this stage. Failure to do so can result in confusion about the exact nature of the risk, ineffective risk controls being implemented, or the risk analysis being over or underestimated. All risks should be identified as per the following Table 3.1.

Level	RISKS TO INCLUDE
Strategic	<ul style="list-style-type: none"> Those that could significantly impact on the achievement of the Council's aim and strategic priorities. Recorded in the Strategic Risk Register; and Used to inform directorate risk identification
Service Level / Asset Group	<ul style="list-style-type: none"> Those that could significantly impact on the achievement of the service objectives. Recorded in each Service's Operational Risk Register; and Used to inform the strategic risk identification.
Project	<ul style="list-style-type: none"> Those that could significantly impact on the achievement of the project and its objectives. Recorded in the Project Risk Register; and Potentially used to inform both Strategic and Service risk identification. <p>Used to inform Highway's risk assessments.</p>
Partnerships (Council)	<ul style="list-style-type: none"> Those risks to the achievement of the Council's vision and key objectives (or departmental or service objectives) from being involved in the partnership or the partnership going wrong; and Recorded in the appropriate risk register (Strategic or service).
Partnerships (third party)	<ul style="list-style-type: none"> Those risks that could significantly impact on the achievement of the partnership and its objectives. Recorded in the partnership risk register (which may or may not be maintained by the Council);

Table 3.1 – Risk Headings

As part of the risk identification process, it is important to consider the scenario that accompanies the risk. This step is concerned with describing risks in sufficient detail and then recording the risk in a consistent format to support effective decision making on the way that the risk is managed. The information that is gathered needs to be analysed into risk scenarios to provide clear, shared

understanding and to ensure the root cause of the risk is clarified. Risk scenarios also illustrate the possible consequences of the risk if it occurs so that its full impact can be assessed.

The description of the risk should include the following key elements:

- Risk Title
- Description
- Situation or event (real or perceived), that exposes us to a risk/statement of fact (the background). (What, why, Where?)
- The trigger event - Include the event that could or has occurred that results in an impact on the objectives being achieved (How, why, When?)
- The likely consequences if the risk materialises (The impact, how big? How bad? How much?
- Consider worst likely scenario)

To assist in describing risk the following table lists the “do’s” and “don’ts” in Risk Management.

Do	Don't
Consider internal and external influences that might affect delivery of the objectives, e.g., customer needs, stakeholder needs and strategy and key performance indicators.	Describe the impact of the risk as the risk itself.
Consider what resources are needed to deliver the objectives and whether there is any uncertainty around having these in place.	Describe everyday issues when the outcome is already known.
Consideration needs to be given to the background and what is driving the risk so that the real risk can be understood.	Define risks with statements which are simply the converse of the objectives.
The risk that will affect the delivery of objectives	

Table 2.3 – Risk Management Process

It is also useful to map each risk scenario against one of the relevant corporate objectives. Although in practice this can be difficult as many of the risks will be quite broad and have a relationship to more than one objective, in this case the primary objective should be identified.

As a further guide in Appendix A includes some example areas of potential risks.

3.2. Stage 2 – Assess Risk

Prioritising risks against potential impact and likelihood enables management to easily identify risks which require additional resources to bring within agreed tolerances for the Council. For each scenario a risk score will be calculated at two distinct levels and in the order shown below:

Inherent (Gross) Risk

The likelihood and impact of the risks identified will need to be considered as if no controls exist.

Residual Risk

The likelihood and impact are re-scored based on an evaluation of the effectiveness of the existing controls or the measures that are put in place.

An example of the components a Risk Register is shown in the following figure:

					Risk Score Before Mitigations			Mitigation: How is risk managed / controls in place
Risk Ref	Risk Group	Risk Desc	Risk Cause	Cons.	Probability Score (Likelihood)	Consequence Score (Impact)	Inherent Risk Score	

Risk Score After Mitigations					
Probability Score (Likelihood)	Consequence Score (Impact)	Target Risk Score	Further Action Required	Risk Owner	Date of last review.

Risk Score within a Risk Register

A matrix is used to plot the risks (each risk should be given an identifying number which is then plotted into the appropriate square on the matrix) and once completed this risk profile clearly illustrates the priority of each risk. When assessing the potential impact of a risk and its consequences these should be linked back to the appropriate objective(s). At the strategic level this would be the impact of the risks on the achievement of the Vision and key objectives, whilst in services this would be the achievement of service objectives and priorities. The challenge for each risk is how much impact it could have on the ability to achieve the objectives.

Likelihood is assessed by asking how likely it is that the trigger event should occur. The combination of both allows the service to plot the risks on the matrix and set the risks in perspective against each

other. Those risks towards the top right-hand corner with higher likelihoods and impacts are usually the most pressing with the priority falling as we move down to the bottom left-hand corner; however, each risk will be judged individually and management actions considered in accordance with the Council's appetite to risk.

It is important when scoring the likelihood and impact of risks that a balanced view is taken with contributions from relevant officers and stakeholders. If there is real doubt over where to score a risk or agreement cannot be reached, then it is best to place the risk in the higher category of likelihood and/or impact and escalated for consideration with senior officers.

At the beginning of this stage a timeframe needs to be agreed, and the likelihood and impact should be considered within the relevant timeframe. For example, the likelihood of a risk occurring in the next 12 months could be very different to its likelihood of occurring in the next 3 years. It is suggested that strategic risks are assessed over the medium term – likelihood of the risks occurring in the next 3 years. Service risks would be assessed over the short term – likelihood of the risk occurring in the next 12 months.

Newham Council use a 4 x 4 risk matrix template, however the Highways Department have adopted the use a 5 x 5 risk matrix template to identify and score risk ratings. Having assessed the likelihood and impact of each risk, the risk is plotted on the 5 x 5 Risk Matrix, shown in Figure 3.2. Guidelines of each category of likelihood and impact are outlined in Appendix A.

PROBABILITY OF EVENT OCCURRING	CONSEQUENCE OF EVENT OCCURRING				
	NEGLIGIBLE	LOW	MEDIUM	HIGH	SEVERE
NEGLIGIBLE	1	2	3	4	5
VERY LOW	2	4	6	8	10
LOW	3	6	9	12	15
MEDIUM	4	8	12	16	20
HIGH	5	10	15	20	25

Figure 3.2 – Risk Matrix

3.3 Stage 3 – Communicate the Risk

The Risk Register is the tool which facilitates data collection and records the identified risks, their mitigations and associated scoring of impact and likelihood. A standard format for data collection has been designed and includes the following :

Title	Description
Risk Reference	unique sequential number for each risk
Risk Group	Group under which the risk resides i.e., Cway & Fway – This includes the risk owner
Risk Description	Outline of the risk and the events which cause this to materialise
Risk Cause	What is the root cause of the identified risk, ask yourself why? Is it training, processes, finances, budget constraints...etc... which are causing the risk to materialise
Consequences	What will happen in the event of the risk materialising – financial, reputational, sickness, injury. Consider worst case scenario.
Probability Score	The probability of the Risk/event happening, taken from the Risk Matrix
Consequence Score	The consequence of the Risk/event happening, taken from the Risk Matrix
Inherent Risk Score	Score of risk based on likelihood of occurring and impact prior to any mitigating actions being implemented
Mitigations	Identification of mitigations prioritised based on impact the actions will have on the scoring and timescales identified.
Target Risk Score	Risk score based on current position, considering mitigations already applied
Managed response Actions	Free text field to provide updates and story over the life of the risk
Escalation reason	Risks can be reported at 3 levels within the organisation (Departmental, Directorate, Strategic) escalations between the levels require this field completing Free text field to outline reason / justification for escalation and requested input needed.

Risk Management Process

4. Risk Matrix

The below categories assist in the prioritisation of risks. It is unlikely that any risk will fit neatly and adhere to all areas within each category. Officers should utilise knowledge and experience when determining risk scores.

Description	LIKELIHOOD OF EVENT OCCURRING	CONSEQUENCE OF EVENT OCCURRING				
		NEG.	LOW	MED.	HIGH	SEV.
Small financial loss, inconvenience to services, potential reputation issue, or minor injury involving no lost time	NEGLIGIBLE	1	2	3	4	5
Financial Loss >£25k, limited disruption to services, could affect reputation, minor injury requiring hospital treatment	VERY LOW	2	4	6	8	10
Some financial loss >£125k, long disruption to services or short failure to deliver services, reputational damage inflicted. Hospital Admission of one person. External intervention possible	LOW	3	6	9	12	15
Financial damage up to £250k, major disruption to, or failure to deliver high profile services, major reputational damage, major injury to more than one person. External intervention likely	MEDIUM	4	8	12	16	20
Financial damage >£250k, long term disruption , or failure to deliver vital services to a large proportion of the community, very serious reputational impact against whole community, death to one or more person. External intervention certain	HIGH	5	10	15	20	25

5. Risk Response

Tolerate, Treat, transfer, Terminate.

Once the risks have been prioritised the next step is to identify how to manage the identified risk. This is vitally important as it is during this stage that improvement occurs. The Council have adopted the 4T's methodology for management of risks as set out in the table below.

Response	Which means?	Example
Tolerate	Do nothing 'extra' to manage the risk.	There will be some risks where your current control measures in place are sufficient to reduce the likelihood and impact of the risk to a tolerable level and there is no added value in doing more e.g., not cost effective or realistic to try and manage it any further. Alternatively, there are some risks that are outside of your control and the organisation has no influence over them e.g., likelihood of the Government introducing legislation that has a negative impact on the Council. The Council therefore must accept that these risks exist, will monitor them and take limited action when possible.
Treat	Mitigating the risk by managing either: the likelihood the impact or both	This is the most likely form of management for most risks. Developing SMART actions to manage the likelihood of risks occurring, their impact if they were to occur, or both. Often preventative controls are used to mitigate likelihood – to ensure something does not happen e.g., training so that staff do not do something in the wrong way or fire walls to prevent computer virus attack. The impact is often mitigated with some kind of contingency e.g., alternative service providers or alternative service arrangements.
Transfer	Insurance/ outsourcing/ partnerships	Insurance, although essential for many types of risk, will not be applicable for most of the risks an organisation may face. Outsourcing or entering partnerships may allow an organisation to transfer certain risks – however by entering such arrangements an organisation will inevitably be faced with new and different risks which it will have to manage.
Terminate	Stop doing a activity	In some instances, a risk could be so serious that there is no other option but to terminate the activity that is generating the risk. In practice this can be difficult for a local authority given the number of statutory functions. However, many authorities have stopped providing a non-statutory service due to the risks surrounding their operation.

4T's Description

The 4T's can also be presented in Matrix Form as shown below.

LIKELIHOOD OF EVENT OCCURING	CONSEQUENCE OF EVENT OCCURING				
	NEGLIGIBLE	LOW	MEDIUM	HIGH	SEVERE
NEGLIGIBLE	Tolerate The Risk and its likely Impact		Transfer The risk to another party		
VERY LOW					
LOW					
MEDIUM	Treat The risk to reduce the likelihood / exposure		Terminate The activity generating the risk		
HIGH					

4T's related to Risk Matrix

The most common way to manage a risk is to produce and implement an action plan that identifies the resources required to deliver the improvements, key dates and deadlines and critical success factors/Key Performance Indicators. Firm ownership of the risk and an accompanying action plan is vital so that the responsibility is clear and progress can be monitored. These plans should not be seen as a separate initiative but should be incorporated into the existing business planning process.

The action plan format is part of the information which will be entered onto the Risk Register. Consideration should also be given here as to the 'Cost-Benefit' of each control weighed against the potential cost/impact of the risk occurring. Note: 'cost/impact' here includes all aspects including financial, resourcing, but also reputational.

Taking Opportunities

This option is not an alternative to those previous, rather it is an option which should be considered whenever tolerating, transferring or treating a risk.

There are several aspects to this examples include:

Whether or not at the same time as mitigating threats, an opportunity arises to exploit positive impact.

For example, if a large sum of capital funding is to be put at risk in a major project, are the relevant controls judged to be good enough to justify increasing the sum of money at stake to gain even greater advantages?

Whether or not circumstances arise which, whilst not generating threats, offer positive opportunities.

For example, a drop in the cost of goods or services frees up resources which can be re-deployed.

When risks are prioritised, and it is shown that some risks are over-controlled or over-regulated then it may be that the reduction in these controls can result in saving that can be used elsewhere.

6. Risk Register

Residual Risk

The likelihood and impact are re-scored based on an evaluation of the effectiveness of the existing controls or the measures that are put in place. These are captured in the Risk Register matrix (example below) which shall include the initial assessment and mitigated assessments.

					Risk Score Before Mitigations			Mitigation: How is risk managed / controls in place
Risk Ref	Risk Group	Risk Desc	Risk Cause	Cons.	Probability Score (Likelihood)	Consequence Score (Impact)	Inherent Risk Score	

Risk Score After Mitigations					
Probability Score (Likelihood)	Consequence Score (Impact)	Target Risk Score	Further Action Required	Risk Owner	Date of last review.

Risk Register

The matrix is used to plot the risks (each risk should be given an identifying number which is then plotted into the appropriate square on the matrix) and once completed this risk profile clearly illustrates the priority of each risk.

7. Mitigating the Risk

Monitoring of risks and the associated mitigations is to be undertaken by:

- being part of existing performance monitoring.
- focusing on those risks above the tolerance line (score) that, because of their likelihood and impact, make them priorities; and
- Be delegated to one responsible body (risk owner).

To achieve this, the following monitoring/review process and frequency must be followed:

- High Level risks (with a score of 9 or above) need to be monitored either monthly or every 2 months Planned and Reactive Maintenance teams within Highways and Sustainable Transport team and escalated to the Management Team
- Highways strategic risks will be monitored quarterly by the Highways and Sustainable Transport Management Team linking into the Performance reporting process
- The highways strategic risk register (containing all appropriate highway risks) will be reported to the Corporate Director for Environment and Sustainable Transport on a quarterly basis
- At a department level, operational risk registers will be reviewed quarterly. Any key operational risk which needs to be escalated to a strategic risk register and will be considered by Highways and Sustainable Transport Management Team within the quarterly highway risk management report
- At project level, monitoring is undertaken by individual Project Boards supported by the relevant Project Manager
- At partnership level, monitoring is undertaken by individual Partnership Boards.

The frequency of review will be in line with the tolerance levels set on the risk matrix.

The Risk Register is to be updated with any relevant commentary information following these review / reporting milestones.

8. Roles and Responsibilities – Risk Management Structure

The risk management process is a continuous one and risks can therefore be reported at any time. However, risks shall be formally reported.

The Highways and Sustainable Transport Management will formulate the Council's strategic highway risk view on a quarterly basis. This will ensure that there is always an up-to-date view of the key highway risks facing the Council and how they are being managed and will include :

- The Highways and Sustainable Transport Management team considering and agreeing the key highway strategic risks on a quarterly basis
- The Environment and Sustainable Transport team receiving all appropriate risk reports on a quarterly basis
- The Corporate Management team receiving a report on the Council's key risks on an annual basis

In addition Heads of Service will revisit their service risks on a quarterly basis. Should any service risks need to be escalated this would be considered through the department and directorate management teams as appropriate and agreed by the Management Team.

Appendix A – Example Areas of Risk

Sources of Risk	Risk Examples
STRATEGIC	
Infrastructure	Functioning of transport, communications and infrastructure. Impact of storms, floods, pollution.
Legislative and Regulatory	Effects of the change in Central Government policies, UK or EU legislation, local and National changes in manifestos. Exposure to regulators (auditors/inspectors).
Social Factors	Effects of changes in demographic profiles (age, race, social makeup etc) affecting delivery of objectives. Crime statistics and trends. Numbers of children/vulnerable adults 'at risk'.
Technological	Capacity to deal with (ICT) changes and innovation, product reliability, developments, systems integration etc. Current or proposed technology partners.
Competition and Markets	Cost and quality affecting delivery of service or ability to deliver value for money. Competition for service users (leisure, car parks etc). Success or failure in securing funding.
Stakeholder related factors	Satisfaction of LCC's taxpayers, Central Government, GOEM and other stakeholders.
Environmental	Environmental impact from Council, stakeholder activities (e.g. pollution, energy efficiency, recycling, emissions, contaminated land etc). Traffic problems and congestion.
OPERATIONAL (Internal influences)	
Finance	Associated with accounting and reporting, internal financial delegation and control, e.g., schools finance, managing revenue and capital resources, neighbourhood renewal funding taxation and pensions.
Human Resources	Recruiting and retaining appropriate staff and applying and developing skills in accordance with corporate objectives, employment policies, health and safety.
Contracts and Partnership	Failure of contractors to deliver services or products to the agreed cost and specification. Procurement, contract and life cycle management, legacy. Partnership arrangements, roles and responsibilities.
Tangible Assets	Safety and maintenance of buildings and physical assets i.e. plant and equipment, ICT equipment and control
Environmental	Pollution, noise, licensing, energy efficiency of day-to-day activities.
Processes	Compliance, assurance, project management, performance management, revenue and benefits systems, parking systems etc.
Professional Judgement and Activities	Risks inherent in professional work, designing buildings, teaching vulnerable children, assessing needs (children and adults).