

No.	Category	Risk	Possible Causes	Possible Impacts	Safety (2-10)	Financial (1-5)	Disruption 1-5)	Image (1-5)	Total Score	Likelihood (1-5)	Risk Rating	Mitigation
1	Operational	Classification of repair response times	Lack of risk assessment training, lack of policies & procedures	Loss of life, serious injury, damage to property and services, traffic disruption, compensation claims, cost of repairs, damage to Council's image, network closure and diversions	10	5	5	5	25	5	125	Review classifications of repairs implement standard repair classifications based on risk
2	Operational	Winter Service	Insufficient funding	Reduction in service, negative impact on economy, damage to Council image.	6	5	5	5	21	5	105	Risk based review of winter service as per the new WELL-MANAGED HIGHWAY INFRASTRUCTURE: A CODE OF PRACTICE
3	Operational	Bridge Collapse due to scour	Further exceptional flooding events	Closure of the asset, no access to ares of the borough, risk of serious injury, poor customer perception, negative impact on the economy.	10	5	5	5	25	4	100	Scour Risk assessments to all highway bridges, scour protection works as required
4	Operational	Energy Budget	Continued increase in energy costs.	Reduction in revenue budget available for highway maintenance	6	5	3	5	19	5	95	Implementation of invest to save scheme to replace luminaires with LED approved start 2016-17
5	Operational	Highway flooding	Further exceptional flooding events	Closure of highway, flooding of homes and businesses, businesses re-locate to other authorities associated loss of income to the Borough	8	5	5	5	23	4	92	Review and changes to gully cleaning, formation of Flood Risk Management Team.
6	Strategic	Implementation of Risk Based CoP	Lack of training, no appetite for considering risk.	Increased costs, loss of compensation claims, not obtaining value for money.	8	5	5	5	23	4	92	Asses training requirements, appoint Highways Risk Officer.
7	Operational	Gradual deterioration of the assets	Insufficient funding, incorrect treatment of the asset, political priorities, ineffective works programming	Increased third party liability claims, poor customer perception, increased whole life costs, potential closure of the asset	6	5	3	3	17	5	85	Regular safety inspections, timely preventative maintenance intervention, early programming of works, development of business case for additional funding implementation of Asset Management principles
8	Operational	Serious / fatal road traffic accidents	Road geometry, poor skid resistance, poor signage and/or road markings, inadequate drainage	Loss of life or serious injury, damage to property and services, environmental damage, prolonged disruption to network, compensation claims, cost of repairs, emergency service charges, environmental clean up, Council's image damaged, negative impact on economy	10	4	2	4	20	4	80	Regular safety inspections and condition assessments. Development of skid resistance policy and works programme. Targeted road safety and highway maintenance improvements

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9	Strategic	Lack of written policies & procedures	Lack of training	Increased costs Compensation claims, damage to Council's image	8	4	2	5	19	4	76	Write polices & procdures for major items of highways & transportation works.
10	Operational	Sudden catastrophic failure of part of the asset	Flooding,, RTA, unexpected structural failure, inadequate preventative maintenance regime	Loss of life, serious injury, damage to property and services, environmental damage, prolonged disruption, compensation claims, cost of repairs, emergency service charges, environmental clean up, negative impact on the economy	10	5	4	4	23	3	69	Regular safety inspections and condition assessments
11	Operational	Trips and falls	Uneven pavements, potholes, rocking kerbs, protruding utility covers	Injury to highway users, third party public liability claims, damage to Council's image	6	3	1	3	13	5	65	Regular safety inspections, timely reactive repairs, targeted planned maintenance works.
12	Operational	Slight road traffic accidents	Road geometry, poor skid resistance, poor signage and/or road markings, inadequate drainage	Personal injury, damage to property and services, environmental damage, disruption to network, compensation claims, cost of repairs, emergency service charges, environmental clean up, Council's image damaged, negative impact on local economy	6	2	2	2	12	5	60	Regular safety inspections and condition assessments
13	Operational	Traffic signal equipment failure leading to RTA	Inadequate inspection regime, inadequate preventative maintenance, ageing equipment	Loss of life, serious injury, damage to property and services, environmental damage, traffic disruption, compensation claims, cost of repairs, emergency service charges, environmental clean up, damage to Council's image, network closure and diversions	10	4	3	3	20	3	60	Regular safety inspections. Planned replacement programme to be developed during the life of the HAMP. Positive engagement with Leeds Traffic Signals Group
14	Operational	Street Lighting equipment failure	Inadequate inspection regime, inadequate preventative maintenance, ageing equipment	Loss of life, serious injury, damage to property and services, environmental damage, traffic disruption, compensation claims, cost of repairs, environmental clean up, damage to Council's image, network closure and diversions	10	4	2	3	19	3	57	Re-introduction of Night Patrols Regular safety inspections electrical/structural. Planned replacement programme to start 2016-17 for luminaires and ??? Columns.
15	Operational	Flooding due to inadequate knowledge of highway drainage assets	Lack of records, loss of experienced staff, inadequate maintenance regime	Carriageway flooding leading to increased likelihood of RTA's, accelerated deterioration due to standing water and water ingress in to the road, flooding of property, compensation claims, increased maintenance costs, increased potential for blocked gullies and pipework	3	3	3	3	12	4	48	Initiate a progressive asset data collection programme, with initial priority given to high speed roads. Continue to develop robust asset information register for drainage assets
16	Operational	Flooding due to climate change	Climate change leading to heavier, shorter storm durations, inadequate infrastructure to deal with run off.	Carriageway flooding leading to increased likelihood of RTAs, accelerated deterioration due to water ingress in to the road, flooding of property, compensation claims, increased maintenance costs, increased blocked gullies and pipework	3	3	3	3	12	4	48	Strategic gully cleansing programme, investigation and improvements to identify flooding hot spots, planned gully replacement programme for low silt capacity units

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17	Operational	Damage / disruption to highway network due to work by utility companies	Poor co-ordination of works, poor quality reinstatements	Traffic congestion, weakening of the highway construction, accelerated damage due to plant movement on the highway, poor public relations, delays to the forward works programme.	2	3	3	3	11	4	44	Good co-ordination of works, pre and post site inspections to adjacent network, close scrutiny of reinstatements, testing and coring of reinstatements
18	Strategic	Decrease in customer satisfaction	Continued deterioration of the highway network, negative media influence	Gap between public expectation and what can be achieved increased. Increased complaints, Council's image damaged	2	3	2	3	10	4	40	Regular engagement with residents, customer and scheme-specific satisfaction surveys. Setting priorities to match customer wishes
19	Strategic	Reductions in budgets affecting long term planning	Funding reductions from Central Government or the Council itself	Unable to meet forward works programme, further deterioration of highway network, increased whole life maintenance costs, Council's image damaged	2	5	2	3	12	3	36	Development of business case for retention / increase in budgets based on accurate long term cost forecasts. Continuously review the forward works programme to allow reallocation of budgets as necessary
20	Operational	Failure to meet forward works programme due to contractors under performance	Insufficient staff and/or plant, inadequate planning, breakdown of plant or supply of materials, sub contractors under performing	Loss of budget due to non completion of programme, continued deterioration of the network, increase whole life maintenance costs, poor customer perception, increased costs due to re-programming of the works	2	4	3	3	12	3	36	Rigorous tender selection process using a weighted quality score to identify the best contractor, early contractor involvement, proactive and realistic works programming, use of performance indicators to monitor progress
21	Strategic	Reduction in budgets resulting from internal political change	National and local elections, change in political leadership, change in political priorities	Less ability to fund the forward works programme, continued deterioration of the assets, increased whole life maintenance costs, Council's image damaged	2	5	2	3	12	2	24	Development of business case for retention / increase in budgets based on accurate long term cost forecasts. Contingency plans for change of priorities in the event of a budget reduction
22	Operational	Disruption to highway network due to major incident	Large fire, major RTA, flooding, civil emergency etc	Loss of life, serious injury, damage to property and services, environmental damage, prolonged disruption, compensation claims, cost of repairs, emergency service charges, environmental clean up, negative impact on the economy	10	5	4	4	23	1	23	Major incident plan in place with suitably experienced officers to respond to. Network Management Plan in place to deal with diversions