

Summary Post Mitigation Risk scores

Reference	Strategic Risk	Feb-22	Jun-22	Sep-22	Nov-22	Change from June
Employer						
E1	Contributions Funding Failure to collect contributions from employers in line with Funding strategy requirements and Rates and Adjustment Certificate	4	4	4	4	↔
E2	Employer data Employers fail to provide accurate and timely data to the PAT team	9	9	9	9	↔
E3	Employer Covenant Delay in employers agreeing Admission Agreement, risk of insufficient security	4	4	4	4	↔
Administration						
A1	Pensions service Delivery Inadequate delivery of Pensions Administration	6	6	6	6	↔
A2	Regulatory Change Risk that new benefit structures can not be set up correctly or in time	6	6	6	6	↔
A3	Production of Statutory member returns Risk of failure to produce ABS, annual allowance and event reports	6	6	10	10	↑
A5	Transfer Scams Failure to comply with CETV anti scam checks	2	2	2	2	↔
A7	MBOS Project Failure to deleiver the new ERP system to efectively deliver for Pension Fund accounting and payroll requirements	3	3	3	3	↔
Governance						
G1	Key Person risk Risk of loss of key / senior staff resulting in lost knowledge and skills with in the Pensions Team	4	4	4	4	↔
G2	Committee / Board Member Lack of decision making caused by loss of Pension Committee/Pension Board members or insufficient knowledge and skills of members	6	6	6	6	↔
G3	Cyber Security Risk of Loss of data or systems breaches through cyber attacks	8	8	8	8	↔
G4	Governance and Compliance Inadequate governance arrangements and controls to discharge powers & duties	3	3	3	3	↔
G5	Data Breach Failure to comply with General Data Protection Regulations	4	4	4	4	↔
G6	Fraud Internal and Externl fraud risk	3	6	6	4	↓
Investment/Funding						
I1	Funding risk - poor investment returns Risk that investment strategy fails to result in performance required to meet the needs of the Funding strategy discount rate	4	4	4	4	↔
I2	Changes to International Trade The changing of Regulations and International Trading relationships along with the trading environment, impact on investments in affected businesses	4	4	4	4	↔
I3	Regulatory risk Failure to comply with regulations, legislation and guidance from an accounting and investment perspective	2	2	2	2	↔
I4	Investment Pooling Inability to comply with government direction on pooling, insuficient subfunds to impliment investment strategy, poor management of the pool	6	6	6	6	↔
I5	Funding risk - higher inflation Risk of inflation leading to increased liabilities, lower asset returns and a funding gap	2	6	6	6	↔
I6	Environmental, Social and Governance Risk of EGS factors within Investment strategy, underlying holdings and implementations of investment decisions	4	4	4	4	↔
I7	Climate change Risk to assets and liabilities associated with Climate Change	4	4	4	4	↔
I8	Liquidity Insufficient cash to pay benefits as they fall due	4	4	4	4	↔

Ref	Strategic Risks	Pre-mitigati on RAG	Risk Control / Response	Post-mitigati on RAG	Risk Owner
Employer Risk					
E1	Contributions Funding Failure to collect contributions from employers in line with Funding strategy requirements and Rates and Adjustment Certificate	9	<ul style="list-style-type: none"> •Monthly Employer contribution monitoring completed •Monitoring of late payments by Employer engagement team to address breaches for late payment. Chasers are sent out during the lead up to the deadline to prompt employers providing information and payment on time •Contributions recorded in Finance system by employer to track all employer cashflows in line with actuarial requirements for Valuation and FRS17/IAS19 reporting requirements. Also enables ability to see trends in contributions collected •Administration strategy in place from January 2021 clearly outlining ability to charge employers for late payment, late receipt of remittance advice or poor quality of data. Late payment charges are now being administered as a deterrent and to cover the impact on the Fund for late payment •Implementation of I-Connect is improving the quality of contribution data received to better aid reconciliation of payments and drill in the accuracy of employers' contribution payments, however functionality is still being improved by the software provided •Report produced for Pensions Board meetings to highlight any late payment of contributions and Employer engagement actions from February 2021 •Covenant review undertaken helps identify employers most likely to have financial difficulties. Engagement with those posing most risk is ongoing •Triennial valuation process aims to stabilise contribution rates where possible and senior management involved in detailed discussions on funding assumptions •Guide to Employers on implications to Pensions on Outsourcing polished and issued to all employers •Contribution deferral policy approved by Committee in June 2020 •Employer engagement team are confirming the correct signatories for contribution submissions to ensure they are signed off at an appropriate management level •Regular communication with Employers through Employer engagement team 	4	Head of Pensions
E2	Employer data Employers fail to provide accurate and timely data to the PAT team	12	<ul style="list-style-type: none"> •Administration Strategy approved in operation from January 2021 after consultation with employers •Employing authorities are contacted for outstanding/accurate information •User Guide and Training provided to Employers for outsourcing implications with LGPS •Regular communication and meeting with administration services regarding service updates and additional data, when required •Employer engagement team established from January 2021 to support employers and provide training where required •Issuance of a quarterly employer newsletter to support employers in their understanding of current pensions issues and activity for the Pension Fund •A data cleansing plan was completed in June 2020 lead by Hymans. The PAT look at Data Improvement as part of BAU and is a regular item on the Administration working group. Data is also cleansed where appropriate as part of other projects •Introduction of I-Connect system will limit employer ability to submit incorrect data. Data is received monthly rather than annually to allow for regular cleansing and discussion with employers •Meetings held between senior pensions Management team and employers where there are current or historic data concerns •As part of the lead into the 2022 triennial valuation data cleansing and challenge is being conducted by the Actuary with PAT to ensure the integrity of data 	9	Head of Pensions
E3	Employer Covenant Delay in employers agreeing Admission Agreement, risk of insufficient security	6	<ul style="list-style-type: none"> •Full suite of admission agreements in place to ensure the Fund can provide comprehensive admission agreements at the outset of negotiations in line with the risk sharing arrangements agreed with the letting employer. New templates have been developed for pooling rate. Fixed rate template and Bond template in place. These templates are shared with the employers early in the process to speed up the agreeing of new admission agreements •The Fund will consider moving to a template portal which will automatically populate the variable data in the admission agreement ensuring no addition terms are changed and provides assurance from external legal term that the agreement is comprehensive and enforceable. However, the functionality is not yet sufficient to make the processes easier for letting employers and contractors •Guide to outsourcing is publicly available and distributed to all employers with coverage in both Employer forum in November 2020 and 2021. This guide directs employers of all the activities and considerations they need to take on any outsourcing arrangement with TUPE staff implications •Officers meet regularly to review status and movement on each in progress admission and an update is provided at team meetings monthly to ensure the admission is complete and effective at all stages •A new data flow and process map has been written to ensure officers request and communicate all the required information in a timely manner and on execution of the agreements data is required in line with the Administration strategy •Admissions in progress are reported quarterly to Board and Committee to ensure awareness of status 	4	Head of Pensions
Administration					
A1	Pensions service Delivery Inadequate delivery of Pensions Administration	9	<ul style="list-style-type: none"> •The PAT team is an in-house provision since December 2020 and enables the management team to have complete control over service delivery •Annual internal audit report on the administration of pensions including regular reporting and monitoring of "red" recommendations to ensure the service is acting in line with best practice. The Fund has received reasonable assurance since bring inhouse •Quarterly Reports to Pension Board and Committee on areas of work and KPIs •New service level KPI's now reportable within the Administration software •Awareness of the Pension Regulator Guidance by all team members, with training provided at team meetings or through provision of courses •Task workflow is managed by the Senior Pension Officers to all PAT staff and helpdesk add all tasks to the workflow system, to ensure all tasks completed as planned and to a high standard. PAT staff also add tasks as appropriate. •Checklists in place and all activity impacting members recorded on member records for other teams members to access •All tasks are peer reviewed. Constant monitoring / checking by team managers and senior officers for more junior staff members •In house risk logs covering projects •SAP / Altair reconciliation monthly to ensure pension payment records complete and correct •Task management systems built into Altair to ensure activity is completed and monitored •Pension meetings held monthly to include S151, COO, IT and Business Admin to ensure other ESCC services are working effectively to ensure the Pensions team can work effectively •Pensions Admin working group in place to discuss service delivery issues on a regular basis 	6	Head of Pensions Administration
A2	Regulatory Change Risk that new benefit structures can not be set up correctly or in time	9	<ul style="list-style-type: none"> •Projects and/or working groups in place to deal with current regulatory benefit changes •Attendance at networks and officer groups to stay on top of upcoming changes in regulation •Reports to Pension Board and Committee to ensure knowledge is shared to decision makers •Oversight via Pension Admin Working Group 	6	Head of Pensions Administration
A3	Production of Statutory member returns Risk of failure to produce ABS, annual allowance and event reports	15	<ul style="list-style-type: none"> •Regular contact with employers to get data •Clear project plan with early communications and planning with milestones to ensure Statements created in time to allow time for distribution to staff •Roll out of I-Connect for employer roll out as monthly interfaces system, to ease year end requirements and correct errors throughout the year. Currently many leavers are not being notified until year-end. This will also cleanse data relating to Annual Allowance •Structure of Pensions team includes Employer Engagement team to support Pensions Administration Team with end of year returns liaising and supporting employers through the process •Breaches policy in place and Breach reporting to Committee and Board quarterly to raise and consider breach reporting levels 	10	Head of Pensions Administration
A5	Transfer Scams Failure to comply with CETV anti scam checks	6	<ul style="list-style-type: none"> •Process in place for making checks required by law and/or recommended by TPR. Appropriate training to be identified and offered to staff to build understanding of risk and appropriate mitigations •Process mapping process has taken place to ensure transfers are fully documented with clear guidance to staff in carrying out this activity •Member informed of "red flags" identified •Scorpion campaign material provided to members seeking a CETV •Quality assurance checks ensure appropriate checks carried out 	2	Head of Pensions Administration
A7	MBOS Project Failure to deliver the new ERP system to effectively deliver for Pension Fund accounting and payroll requirements	6	<ul style="list-style-type: none"> •Officers are part of the project roll out and involved in testing. Needs of the Pension Fund are therefore being considered •Officers produced process mapping for all functions within the existing finance system •A specific stream of planning has been identified in the project for the interface with Altair •S151 officer on the programme board •Heywoods paid to produce a scheme specific payroll data output report for transfer to Oracle 	3	Head of Pensions
Governance					
G1	Key Person risk Risk of loss of key / senior staff resulting in lost knowledge and skills with in the Pensions Team	12	<ul style="list-style-type: none"> •Diversified staff / team •Attendance at pension officers' user groups to network and exchange information •Procedural notes which include new systems, section meetings / appraisals •Succession planning within team structure, building from within the team •Robust business continuity processes in place around key business processes, including a disaster recovery plan •Knowledge of all tasks shared by at least two team members within PAT and in addition can be covered by senior staff in all areas •Training requirements are set out in training strategy, job descriptions and reviewed annually with team members through the appraisal process •Training officer post within team structure since 2021 •Training strategy in place and regularly reviewed with training log where required •Recruitment ongoing to provide cover for key people 	4	Head of Pensions / Head of Pensions Administration

G2	Committee / Board Member Lack of decision making caused by loss of Pension Committee/Pension Board members or insufficient knowledge and skills of members	9	<ul style="list-style-type: none"> Record kept of terms of Office Pension Board terms of Office staggered Deputy Chairs in place to cover chair absence Officers aware of election cycles Training plans in place for new members 	6	Head of Pensions
G3	Cyber Security Risk of Loss of data or systems breaches through cyber attacks	16	<ul style="list-style-type: none"> ICT defence - in-depth approach. Utilising firewalls, passwords and ICT control procedures including system access and account deletion protocols. Network activity is monitored to identify security threats. Email and content scanners Using anti-malware which is regularly updated, together with other protective software ICT performs penetration and security tests on regular basis Encryption used on all data transfers Service level agreement with termination clause Regular reports SAS 70/AAF0106 Industry leaders providing services to the fund with data protection and cyber defence systems Risk assessment completed with all new contracts with data transfer and new associated systems including penetration testing at outset Pensions Team specific BCP in development Engagement with ICT to understand and receive reports on monitoring for successful cyber attacks. Cyber training is provided to all staff around techniques and methods used to launch cyber attacks 	8	Head of Pensions
G4	Governance and Compliance Inadequate governance arrangements and controls to discharge powers & duties	6	<ul style="list-style-type: none"> Training strategy in place which covers Pension Committee, Pensions Board and officers 100 days of internal audit commissioned for each calendar year with regular reporting from IA to committee and board, including Governance and Compliance areas External auditor provides audit plan at planning stage for each financial year and this is discussed by Audit committee as well as Pension Committee and Board Investment regulations require proper advice, procurement processes in place to ensure quality within replacement advisers Review carried out against TPR COP14 requirements to identify any governance gaps Specialist legal advisers and governance advisers to provide clear and accurate advice to the Fund on point of law or regulation Publication of annual Governance and Compliance Statement explaining governance arrangements and reviewed and approved by Board / Committee Training coordinator appointed. This officer liaises with chair of Pension Board and Committee to identify training needs 	3	Head of Pensions
G5	Data Breach Failure to comply with General Data Protection Regulations	9	<ul style="list-style-type: none"> Contracts with external parties where there is a data role have clear terms and conditions as part of the data processing agreements Data Impact assessment is carried out on all new tenders where data is involved DPO is in place via ESCC Privacy notice is on the website - the privacy statements have been refreshed in August 2021 and April 2022 Memorandum of Understanding in place with employers within the fund All staff are required to complete an information governance course on joining the Council and this is refreshed annually Information governance Internal audit completed in Q4 2020/21 with a reasonable assurance level and all recommendations were completed Pensions Manager for Governance and Compliance completed review on GDPR in Q4 2020/21 resulting in a newly designed webpage, new privacy notices and change to the retention period 	4	Head of Pensions
G6	Fraud Internal and External fraud risk	12	<ul style="list-style-type: none"> Quarterly review of log in credentials Senior officers have sight of bank account Senior officers are signatories to bank account Multiple sign off needed to make payment Mortality checks, Tell us once and NFI data Contract in place with a third party to support with mortality and address training 	4	Head of Pensions
Investment/Funding					
I1	Funding risk - poor investment returns Risk that investment strategy fails to result in performance required to meet the needs of the Funding strategy discount rate	9	<ul style="list-style-type: none"> Strategy is supported by expert Investment consultants. Challenge to Consultants through Independent Adviser Triennial valuation ensures funding position is known and contribution rates are stabilised Quarterly Performance monitoring, investment manager monitoring from consultants and Link for ACCESS sub funds. Officers have a rolling programme to meet and challenge investment managers Annual Investment Strategy Review, with interim rebalancing Quarterly Reporting to Pensions Committee, with decisions approved by committee, including Fund Manager performance Training strategy in place to ensure officers and committee members have sufficient knowledge and skills to implement and change the investment strategy Investment decisions are made in compliance with the ISS/FSS All investment decisions made, based on proper advice Diversified strategy to reduce correlation of manager volatility Changes to investment strategy are discussed with the actuary to ensure anticipated implications on funding aligned Revision of the Asset Liability Model to support a viable Strategic Asset Allocation for the new valuation 	4	Head of Pensions
I2	Changes to International Trade The changing of Regulations and International Trading relationships along with the trading environment, impact on investments in affected businesses	9	<ul style="list-style-type: none"> Diversification of the Fund's investments across the world Regular monitoring of investment performance and reports on potentially problematic trends Diversification of the Fund's investments across multiple asset classes Currency Hedging requirements considered within the investment strategy Officers receive regular briefing material on regulatory changes and attend training seminars and ensure any regulatory changes are implemented 	4	Head of Pensions
I3	Regulatory risk Failure to comply with regulations, legislation and guidance from an accounting and investment perspective	9	<ul style="list-style-type: none"> Pensions Officers are kept up to date with changes to legislative requirements via network meetings, professional press, training and internal communication procedures Pension Fund financial management and administration processes are maintained in accordance with the CIPFA Code of Practice, International Financial Reporting Standards (IFRS), and the ESCC Financial Regulations Regular reconciliations are carried out between in-house records and those maintained by the custodian and investment managers Internal Audits - carried out in line with the Pension Audit strategy External Audit review the Pension Fund's accounts annually Specialist legal advisers to provide clear and accurate advice to the Fund on point of law or regulation Breaches policy in place to ensure breaches mapped and reported 	2	Head of Pensions
I4	Investment Pooling Inability to comply with government direction on pooling, insufficient subfunds to implement investment strategy, poor management of the pool	9	<ul style="list-style-type: none"> ACCESS Support Unit team provide support to the pool Operator contract provided by Link for assets held within the ACS The ACCESS Contracts Manager will monitor Link's progress closely. If Link cannot resolve issues in a reasonable timeframe, then alternative options may be considered, e.g. Funds may continue to hold the sub fund outside the ACS KPI's introduced within revised operator agreements Consultants involved in analysing the creation of sub-funds and transitioning of our current assets into the pool, under a variety of scenarios Opportunities to transfer securities in 'specie'. Reducing cost on transition Transition manager in place to preserving asset values, managing risk and project managing the transition process to ensure that costs are monitored and controlled Due Diligence completed by legal advisers to ensure no hidden costs or governance issues not known at time of decision to invest S151, chair of pension committee and monitoring officer representation on respective committees and working groups to ensure ESPF involved in all decisions and concerns and questions can be raised early in processes Regular meetings between officers and ACCESS pool with officers on a number of working groups to ensure involvement in decision making 	6	Head of Pensions
I5	Funding risk - higher inflation Risk of inflation leading to increased liabilities, lower asset returns and a funding gap	12	<ul style="list-style-type: none"> Investment strategy include weighting to index linked gilts, infrastructure and real estate which are all inflation correlated to mitigate increases in liabilities from inflation Potential to further increase infrastructure weightings Fund monitor portfolio sensitivity to inflation via expert investment consultants Triennial Valuation assumptions include local knowledge of the Administering authority on anticipated pay inflation Flexibility in the DGF mandates to react to the market and adapt the investment portfolio Report received in Feb 22 on inflation possibilities with possible actions to take in the medium term. To be considered as part of the strategy review day Quarterly monitoring of funding position helps identify risk early 2022 Triennial Valuation currently underway - inflation models used to estimate the average inflation across a 20 year time horizon, including consideration of the current high inflation environment 	6	Head of Pensions

16	Environmental, Social and Governance Risk of EGS factors within Investment strategy, underlying holdings and implementations of investment decisions	6 <ul style="list-style-type: none"> •Statement of Responsible Investment Principles outline investment beliefs within ESG, implementation of decisions and monitoring of EGS factors •Investment Working Group and ESG working group consolidated into a single group to ensure ESG is in the heart of all investment decisions •Trim unconscious exposure to companies with poor ESG rating through removal of traditional index funds ensuring active managers have a strong conviction in the underlying companies including on ESG matters and less traditional passive indexes / smart beta funds have robust screening processes in place to ensure ESG principles are taken into account •Tracking of the portfolio as underweight in fossil fuel exposure to benchmarks •Production of annual reports on the carbon footprint of the Fund and review of managers from EGS perspective including transition pathway of underlying companies •2020 Stewardship code submission in process •Membership of collaborative groups to help drive policy change •Challenging managers on their holdings with regard ESG issues •Introduction of an ESG assessment for all managers reported in July 2021 including improvement actions for each manager on ESG methodology, reporting or collaboration. This will be updated and reported annually •Engaging via managers and investor groups including LAPFF with companies and driving them forward to comply with key ESG concerns using the greater voice by combined investment power 	4	Head of Pensions
17	Climate change Risk to assets and liabilities associated with Climate Change	12 <ul style="list-style-type: none"> •Statement of Responsible Investment Principles (SRIP) outlines investment beliefs including Climate Risk. The Fund take the SRIP into account for implementation of decisions and monitoring of investment managers, carbon emissions and climate risk to the Fund •Investment Working Group and ESG working group consolidated into a single group to ensure ESG is in the heart of all investment decisions •Restructuring of the equity portfolio removed structural exposure to fossil fuel companies to avoid high risk companies from ac climate perspective •The Fund are able to exploit opportunities form the low energy transition by investing in climate impact funds and resource efficient companies •The Fund has trimmed unconscious exposure to companies with high Carbon emission, poor energy transition plans and or fossil fuel companies, through removal of traditional index funds •Member of Institutional Investors group on climate change (IIGCC), the Fund also expects its managers to be IIGCC members •The Fund carries out annual carbon foot printing to better understand the carbon exposure and energy transition plans within the portfolio. Additionally, the Fund carries out ESG impact assessment of all investment managers which includes a climate score. •Signatory to UN PRI with first planned submission in 2023 (as no 2022 submission window) •Commitment to report TCFD's with a first attempt published in the 2021 Annual Report •The Fund has planned for climate scenario modelling which will help better understand this risk and allow further consider approaches in tackling these risks •Where exposed to fossil fuels, the Fund uses its vote to drive engagement and improved practices. A number of Fund managers are Climate 100+ engagement partners, leading on this work with top emitting companies, while all managers are IIGCC members for collaborate weighting of AUM to influence action •Focus on Climate change through training to committee and officers •Focus on Climate Change in decision making and strategy changes •Immaterial impact to the Fund value from direct exposure to fossil fuel companies in the instance of carbon taxes, valuation falls or stranded assets due to the underweight very low exposure to this sector 	4	Head of Pensions
18	Liquidity Insufficient cash to pay benefits as they fall due	8 <ul style="list-style-type: none"> •Contributions monitored on monthly basis •Monitoring of members close to retirement •Daily cash position monitored •Distributing investments to ensure stream of income from investment activity •Income from investments is considered as a key risk in all investment strategy decisions and the income profile managed •Liaison between administration and investment team on cash requirements •Cash Management strategy to be compiled in 2022/23 •Cash Management internal audit planned for Q3 2022/23 	4	Head of Pensions

Risk Register Risk Scores

The risk scores are calculated using the risk matrix below:

90-100%	This week	Very High	LIKELIHOOD	5	5	10	15	20
60-90%	This Month	High		4	4	8	12	16
40-60%	This year	Medium		3	3	6	9	12
10-40%	Next 5 years	Low		2	2	4	6	8
0-10%	Next 10 years	Very Low		1	1	2	3	4
				1	2	3	4	4
IMPACT								
				Negligible No noticeable impact	Minor Minor impact, Some degradation of service	Major Significant impact, disruption to core services	Critical Disastrous impact, Catastrophic failure	
SERVICE DELIVERY	Handled within normal day-to-day routines.			Management action required to overcome short-term difficulties.		Key targets missed. Some services compromised.		Prolonged interruption to core service. Failure of key Strategic Project
FINANCAL	Little loss anticipated.			Some costs incurred. Handled within management responsibilities.		Significant costs incurred. Service level budgets exceeded.		Severe costs incurred. Statutory intervention triggered.
REPUTATION	Little or no publicity. Little staff comments.			Limited local publicity. Mainly within local government community. Causes staff concern.		Local media interest. Comment from external inspection agencies. Noticeable impact on public opinion.		National media interest seriously affecting public opinion