# Maintenance Loan payments reach £2.1bn as new academic year gets underway

News story

As the 2022/23 academic year gets underway, SLC has been making Maintenance Loan payments to students across the country.



Monday (26th September) was its biggest payment day of this academic year, with £797m of funding paid into the bank accounts of 372k students. This brings the total paid out so far this term to £2.1bn.

SLC is able to release payments to students once they have enrolled or registered with their university or college, and we have received this confirmation. Students can quickly and easily check the status of their payment via their online account.

If a student has applied for student finance late, they may not get their full entitlement straight away, as it can take six to eight weeks to process an application. In these cases, once eligibility is confirmed, the minimum Maintenance Loan is paid first, followed by a top-up payment if the student is entitled to more funding. If more information is needed, SLC will get in touch. More information can be found here — Find out more about applying late online.

To provide support to students who have questions about their payment, SLC has made a 'common questions' area available within their online accounts and they can also access our <u>online guide to payment</u>. Students can keep up with all the latest student finance information by following Student Finance England on <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u> and <u>YouTube</u>.

\*Please note these are provisional figures. Full year figures are published in SLC's Student Support for Higher Education statistical release, which will be published on 24 November.

# <u>Avian influenza prevention zone</u> <u>declared in Norfolk, Suffolk and parts</u> <u>of Essex</u>

Following a number of detections of avian influenza in both poultry and wild birds across Norfolk, Suffolk and parts of Essex, the United Kingdom's Deputy Chief Veterinary Officer has declared an Avian Influenza Prevention Zone (AIPZ) across the region to mitigate the risk of further outbreaks of disease occurring.

This means that from midday on Tuesday 27 September it will be a legal requirement for all bird keepers in Norfolk, Suffolk and parts of Essex to follow strict biosecurity measures to help protect their flocks, of whatever type or size. Bird keepers are advised to consult the <u>interactive map</u> to check if they are impacted and should then read the <u>AIPZ declaration</u> which sets out the requirements in a regional AIPZ.

All bird keepers, including hobby and backyard poultry keepers and anyone who keeps chickens, ducks and geese as pets must take <u>steps</u> to limit the risk of the disease spreading to their animals.

Additionally, keepers with more than 500 birds will need to restrict access for non-essential people on their sites, workers will need to change clothing and footwear before entering bird enclosures and site vehicles will need to be cleaned and disinfected regularly to limit the risk of the disease spreading. There is also a mandatory requirement to keep records and to make them available on request.

The UK Health Security Agency continue to advise that the risk to public health from the virus is very low and the Food Standards Agency advice remains unchanged, that avian influenzas pose a very low food safety risk for UK consumers. Properly cooked poultry and poultry products, including eggs, are safe to eat.

The UK has faced its largest ever outbreak of bird flu with over 150 cases confirmed across the country since late October 2021. The introduction of this regional AIPZ comes after the disease was detected in kept birds at 10 premises in the affected regions since the beginning of September, as well as several reports in wild birds.

The United Kingdom's Deputy Chief Veterinary Officer Richard Irvine said:

Following an increased number of detections of avian influenza we have declared an Avian Influenza Prevention Zone across Suffolk, Norfolk and parts of Essex. This means that all bird keepers in the

region must urgently take action now to both prevent disease getting in to flocks and it spreading any further.

Whether you keep just a few birds or thousands, you are now legally required to introduce stricter biosecurity standards on your farm or small holding. It is in your interests to do so in order to protect your birds from this highly infectious and devastating disease.

The introduction of an AIPZ follows the recent increase in cases of bird flu in poultry and other captive birds in the area and increased reports of mass mortality in wild birds.

The regionalised AIPZ now in force does not include a requirement to house birds. However, this is being kept under constant review. Further disease control measures will be based on the latest scientific evidence and veterinary advice.

The Avian Influenza Prevention Zone (AIPZ) means bird keepers in the affected regions must:

- Cleanse and disinfect clothing, footwear, equipment and vehicles before and after contact with poultry and captive birds — if practical, use disposable protective clothing
- reduce the movement of people, vehicles or equipment to and from areas where poultry and captive birds are kept, to minimise contamination from manure, slurry and other products, and use effective vermin control
- keep records of mortality, movement of poultry and poultry products and any changes in production
- thoroughly cleanse and disinfect housing on a continuous basis
- keep fresh disinfectant at the right concentration at all farm and poultry housing entry and exit points
- minimise direct and indirect contact between poultry and captive birds and wild birds, including making sure all feed and water is not accessible to wild birds
- prevent access by poultry to ponds and watercourses and ensure that birds are kept in fenced or enclosed areas

The AIPZ will be in place until further notice, and will be kept under regular review as part of the government's work to monitor and manage the risks of bird flu.

Bird keepers and members of the public should report dead wild birds to Defra's national dead wild bird helpline on 03459 33 55 77 and keepers should report suspicion of disease in their birds to APHA on 03000 200 301. Keepers should familiarise themselves with our avian influenza advice.

Defra has also set out practical guidance to support land managers, the public and ornithological and environmental organisations in their response to the growing threat of avian influenza to wild birds. The 'Mitigation

<u>Strategy for Avian Influenza in Wild Birds in England and Wales'</u> sets out how these groups, together with the government and its delivery partners, can mitigate the impact of avian influenza on wild bird populations whilst protecting public health, the wider environment and the rural economy.

# The UK is concerned about democratic backsliding across the OSCE region

Thank you, Madam Moderator,

The United Kingdom believes that inclusive, democratic institutions and accountable governments are the foundations on which open, stable and prosperous societies thrive. Societies with the full participation of women and marginalised groups and equal rights for all. Resilient, responsive, and representative.

And yet, we have seen authoritarian influence on the rise in states across the OSCE region leading to democratic backsliding, restrictions to civic space and the rollback of rights.

Where human rights abuses go unchecked, we see the seeds of conflict sown, often with devastating consequences for communities and nations. The absence of democratic freedoms and equality, good governance and the rule of law also impedes nations' prosperity, deters international investment, restricts innovation, and reduces opportunities.

The work of the Office for Democratic Institutions and Human Rights (ODIHR) is vital to strengthening democracy and fostering long-term security. We fully support ODIHR's election observation methodology — its impartial and objective approach to elections has helped improve electoral processes across the OSCE region.

It is crucial that ODHIR has a proper budget to continue delivering on its mandate and ensure democratic progress is sustained.

We also recognise that the information people need to participate democratically is increasingly moving online. Collectively, we need to ensure that journalists are able to operate safely and to hold the powerful to account. We must also remain vigilant of disinformation by malign actors.

Madam Moderator — Russia's invasion of Ukraine shows that it is critical that we work even harder to strengthen democratic resilience. Internal repression in Russia and Belarus is tied to external aggression. We stand totally and firmly with Ukraine.

Madam Chair — in conclusion, societies that govern themselves democratically,

where all groups meaningfully participate in political and economic processes, are safer, stronger and more secure. We call on all OSCE participating states to recognise the importance of democracy in underpinning collective security, to work together to combat democratic backsliding in the OSCE region and to fully support the vital work of ODIHR.

Thank you very much.

# Need to do a tax return for the first time? Tell HMRC by 5 October

HM Revenue and Customs (HMRC) is reminding customers who need to complete a tax return for the 2021 to 2022 tax year to let HMRC know by 5 October 2022. They can do this by registering for Self Assessment.

Before customers can complete their first tax return, they need to register with HMRC to receive their Unique Taxpayer Reference (UTR). Customers need their UTR to file a return. The tax return deadline for the 2021 to 2022 tax year is 31 October 2022 for those completed on paper forms, and 31 January 2023 for online returns.

HMRC is encouraging customers to plan ahead to give themselves the best chance to complete their Self Assessment on time. Customers who file early will benefit from knowing what they owe, allowing them to budget and pay at a time that suits them. If customers are due a refund, they could get it back quicker. Customers have until 31 January to pay any tax owed.

Myrtle Lloyd, HMRC's Director General for Customer Services, said:

By registering early, Self Assessment customers will have plenty of time to prepare and access all the help available to them before they start their first tax return.

Help and support is available to anyone completing a return, just search 'Self Assessment' on GOV.UK.

Customers can <u>check if they need to complete a tax return</u> by using the free online tool on GOV.UK. Customers who are new to Self Assessment for the 2021 to 2022 tax year may include:

- those who are newly self-employed and earned more than £1,000
- a new partner in a business partnership
- those who have received any untaxed income
- those claiming Child Benefit but they or their partner have an income above £50,000

Self-employed customers must also register for Class 2 National Insurance contributions.

The easiest way to complete a tax return is online. Once a customer is registered for Self Assessment, they can use their UTR to access their tax return, as well as details of their income or earnings and other financial records. Detailed information on <a href="https://www.what.eo.wha

For customers who have already filed their tax return but still need to pay any tax owed, they can visit GOV.UK to find out more about the payment options. Customers can now make Self Assessment payments quickly and securely through the <a href="free HMRC">free HMRC</a> app. If anyone is worried about paying their tax bill, support is available on GOV.UK, for example if customers are unable to pay in full, they may be able to set up a monthly payment plan online if the tax owed is less than £30,000.

All Self Assessment customers need to be alert to the risk of criminals emailing, calling or texting claiming to be from HMRC. Scams come in many forms — some threaten immediate arrest for tax evasion, others offer a tax rebate. Contacts like these should set alarm bells ringing and HMRC advises customers to take their time and check scams advice by searching for 'HMRC scams' on GOV.UK. HMRC also urges customers never to share their HMRC login details. Someone using them could steal from the customer or make a fraudulent claim in their name.

Find out more about Self Assessment.

The Time to Pay service allows any individual or business who needs it, the option to <u>spread their tax payments over time</u>. Self Assessment customers with up to £30,000 of tax debt can do this online once you have filed your return.

To <u>download the free HMRC app</u>, customers can visit the App Store from their iPhone or Google Play for Android and follow the download and set up instructions from there.

You can pay your Self Assessment bill through your PAYE tax code as long as:

- you owe less than £3,000 on your tax bill
- you already pay tax through PAYE, for example you're an employee or you get a company pension
- you submitted your paper tax return by 31 October or your online tax return online by 30 December

If you received coronavirus support scheme payments, including from the Self-Employment Income Support Scheme or Coronavirus Job Retention Scheme, you will need to include details of all the payments you received during the 2021 to 2022 tax year on this year's tax return.

The government is offering <u>help for households</u>. Check GOV.UK to find out what cost of living support you could be eligible for.

# <u>Special feature: How GAD uses data</u> <u>science to enhance our service</u> <u>offering</u>

Data science is the combination of programming code and statistical knowledge to extract understanding and insight from data.

Data has always been a key part of the work of actuaries, and harnessing data science techniques enables GAD to work more efficiently and maximise the value of data for departments across government.

For example, the use of data science techniques allows us to use <u>reproducible</u> <u>analytical pipelines</u> to handle repeatable tasks effectively, and the use of modern coding languages allows us to create 'self service' dashboards for clients.

GAD recognises the important part that data science can play in how we process, analyse and gain insights into the high volume of data used in actuarial work.

As part of the <u>GAD 2025 Strategy</u>, we have committed to investing in data science expertise for our actuaries and analysts to ensure that GAD's clients the highest quality of advice possible. In the rest of this article, we set out how our clients have already begun to experience the benefits of this commitment.

#### Pensions dashboards

Building on the increased programming expertise required for data science, we have developed several dashboards which are used internally to automate processes which are repeated regularly. We have 3 main dashboards that we use for the public sector schemes that we manage.

We have created the dashboards using the open-source programming language <a href="Python">Python</a>. The dashboards use centralised code, so any changes to the model only need to be made once (rather than for each individual scheme). This saves a significant amount of time and ensures that our approach to all schemes is consistent.

### 1. Valuation calculations dashboard

By building these calculation routines into a structured model, we are able to ensure consistency of quality across all of the public service pension valuation calculations, rapidly update results for changing assumptions and instantly generate visual representations of the actuarial calculations.

This is brought together in our easy to use <u>valuation calculations dashboard</u>. It consists of drop-down menus and inputs which allow the user to select which scheme they wish to work on and what kind of analysis they want to carry out.

### 2. Analysis of experience dashboard

The <u>analysis of experience dashboard</u> is used to analyse changes in membership between valuations. It looks at how many members have exited the scheme and how that compares with what was assumed. This analysis allows us to adjust our assumptions going forward to reflect changing membership characteristics and ensure that appropriate contribution levels remain in place.

#### 3. Retirement calculator

The McCloud legal ruling gives some pension scheme members the choice between benefits in two different types of pension scheme.

GAD's <u>retirement calculator</u> has recently been upgraded by our data science specialists to improve the user experience. It uses Python to project the benefits that people will get at retirement in both schemes. This allows members to view what their own personal benefits will be and make an informed decision on which benefits they choose.

#### National Situation Centre

In addition to our in-house dashboards that have been developed, we have seconded staff to the National Situation Centre (SitCen). SitCen predict and manage developing crises in the UK. Our staff have used actuarial and data science skills to develop dashboards which support their analysis. Read more about the secondment experience of one GAD member of staff in a blog by Sean Laird.

## **Heat decarbonisation plans**

The UK government has committed to reaching net zero carbon emissions by 2050 or earlier if possible. Heat decarbonisation involves reducing the amount of carbon produced by central heating systems. Given the cold weather that we experience in winter, reducing the carbon footprint of our heating systems will be key in our move towards net zero.

The Department for Education (DfE) commissioned external consultants to produce plans for 205 schools to help with the <u>decarbonisation of school</u> <u>estates</u>. The heat decarbonisation plans received for each school contained a variety of Word, PDF and Excel files.

DfE asked GAD to help support its work by:

- creating a database to collate information contained in the heat decarbonisation plans
- extracting the relevant information from the set of documents

- designing a set of criteria to identify which schools to target
- assessing the project against the government's levelling-up policies

GAD worked closely with DfE to agree the scope of our work and the timeline for delivery of each project stage.

We met several issues when extracting and processing the data from the heat decarbonisation plans provided, such as:

- report formats which varied by school
- documents that were not searchable
- different names being used for the same school across different documents
- figures not always reconciling across documents

To address some of these issues, we used data science techniques to extract and manipulate data.

A 'fuzzy matching' technique was used to map school names that were not identical but were likely to refer to the same school.

**Fuzzy matching:** A technique for determining how similar 2 character-strings are to each other. It is usually based on on the number of multi-letter chunks that they share. For example, 'washing' is highly similar to 'wasting' because the two words share the chunks 'was' and 'ing'.

It is often used to link datasets where identifying labels may have minor spelling mistakes, so relying on a perfect match would lead to errors.

Our team also used a 'data scraping' algorithm to automatically cycle through the documents received to extract specific information.

**Data scraping:** Extracts information from a document or web site and exports it into a spreadsheet or other file. For example, wording from PDF documents can be automatically placed into a spreadsheet so that it can be manipulated and analysed. It can also be used to to extract information held on web sites for investigation.

Not all the required information was available at the start of the project. Having a process that was robust and easy to reproduce and iterate was crucial. We were able to re-run the exercise quickly when more information came to light.

None of this would have been possible without the expertise of GAD's data scientists.

We provided the client with a clean, centralised database of key data fields from the heat decarbonisation plans. We also produced a ranking of all schools based on decarbonisation priorities. This information allowed DfE to make efficient decisions on funding allocation to schools.

### Collaboration with universities

GAD has been working with UK universities this year to suggest data science projects being carried out by students. The projects contribute towards the students' Masters degrees.

Each project challenged the student to use data science techniques to analyse real world data. Students use techniques such as linear regression and machine learning to analyse the data and derive insights. Actuarial staff from GAD provide oversight and feedback on their work throughout.

The University of Manchester, City University and University College London have taken part this year. The projects we proposed were based around public service pension scheme data collected by GAD during recent projects in this sector.

Unprocessed data from the 2016 and 2020 valuations of the cost of providing public sector pensions is used by students as the basis of some of the analysis.

Areas of focus included:

- Geographic analysis do the characteristics of schemes different between different UK regions? For example, do salaries and member behaviours vary in practice between regions? What factors might explain any patterns found?
- Workforce changes how do members progress between different job roles or decide to leave over time? Can we predict the demographics of the scheme in 2024 based on this?

The results of this analysis have been used to support workforce planning and recruitment.

Our <u>relationships with universities</u> are ongoing and we continue to support the development of data science experts.

## Moving forward

Data science is a growing area of GAD's expertise. Whether it is <u>Python</u>, <u>R</u>, <u>R</u> <u>Shiny</u> or <u>JavaScript</u> — the list of programming languages is a long one. At the same time we are deploying advanced statistical methods to improve our understanding of the issues faced by our clients, enabling more impactful advice, and ultimately better outcomes for the UK.