

School Meals Uptake: Statistical Review September 2022



This report presents findings from the 2022 review of school meals uptake statistics

September 2022



Reader Information

Purpose The purpose of this report is to present findings from the 2022

review of DE school meals uptake statistics carried out by DE

Statistics and Research Team (SRT).

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1 About this review

1.1 Background

The Department of Education (DE) collects information annually from all grant-aided schools in Northern Ireland on the uptake of school meals. This data collection exercise is commonly known as the School Meals Census and is carried out by the Statistics and Research Team (SRT) within the Department. It is an annual snapshot of school level data for each nursery, special, primary and post-primary school. The data collected is based on school meals taken on a reference date (usually the Friday of the first full week in October) each year. The main purpose of collecting this data is to provide DE Food in Schools (FIS) Team with trend data on uptake of school meals for monitoring and planning purposes. Data collected through the School Meals Census, together with information on pupil enrolments and numbers entitled to free school meals, is published in an annual statistical bulletin:

DE website - School meals statistical bulletins

In line with the principles and practices contained within the Code of Practice for Statistics (<u>Code of Practice for Statistics</u>) in early 2022 SRT carried out a review of the processes, management and outputs relating to this data collection. A key aspect of the review was engagement with users of the statistics to ensure that the outputs were meeting their requirements.

1.2 Context

For the 2021/22 academic year, the Department requested SRT to suspend the School Meals Census in order to divert analytical resources to other priorities. In the absence of 2021/22 uptake data from SRT, DE FIS Team instead asked the Education Authority (EA) Catering Team to provide information on uptake of school meals from their own data collection. This review includes an examination of the extent to which the EA data met the needs of DE in 2021/22.

In recent years, a minority of school principals have questioned the need for the annual School Meals Census data collection, or indicated that there is duplication of effort as similar information is made available to the EA Catering Team. This review examines the extent to which there is duplication and whether there are any opportunities to reduce the burden on schools as data suppliers.

1.3 Review Objectives

The objective was to review the statistics currently produced by DE on uptake of school meals and to consider what changes are needed to best meet current and future user needs. In doing so:

- consider and recommend a range of statistics that will understand and best meet the needs
 of users, and be accountable, flexible, transparent, and no more burdensome than is clearly
 justified;
- consider the current data collection methodology and recommend any changes necessary to promote recognised and high-quality statistical standards; and;
- consider the potential to use other data sources (EA) and data collection methods (School Census) to maximise quality and efficiency and reduce duplication of effort and burden on schools.

1.4 Scope

- I. Undertake a review of the users of the data and their needs and assess whether the current statistical outputs meet their current and future needs.
- II. Review and summarise the normal data collection methodology in place for 2020/21 DE data collection (ie prior to suspension for 2021/22).
- III. Review and summarise alternative sources/ data collection methodologies including a review of the methodology put in place for the 2021/22 data collection by the EA.
- IV. Review and summarise approach to collecting and presenting school meal uptake statistics in other UK regions and ROI.
- V. Identify the issues/challenges for data suppliers in both current and any proposed new data collection methodology which may arise.
- VI. Examine the publication frequency, data production timeline, the response burden cost and the in-house statistician resource costs to produce under the 2020/21 methodology and identify any opportunities for efficiencies.
- VII. Recommend the data collection approach for 2022/23.

1.5 Methodology

SRT carried out the review in early 2022.

The review examined a number of aspects of the School Meals Census. It assessed the degree to which user requirements are met and whether the data produced is fit for the purposes for which it is required. It reviewed various methodological aspects of the data collection such as the data collection instrument and the collection process. It reviewed the provision of school meal uptake statistics in other UK regions and ROI. Alternative ways of collecting the data were also explored and their potential assessed.

An online user survey was developed and this was live on the DE website from 7 February 2022 to 18 March 2022. This sought user feedback mainly about the statistical outputs – the main bulletin, the statistical tables and the infographic produced annually. DE Food in Schools Team contacted key partners to make them aware of the survey and to encourage them to give their feedback via the survey.

Semi-structured interviews took place with those thought to be key users of the data – the EA Catering Team and DE FIS Team. These explored the areas covered in the user survey in greater detail. A small number of meetings also took place within DE, the EA and C2K to investigate alternative ways of collecting the data.

The review team also carried out desk-based research to examine various methodological aspects of the survey, including the data collection process, the data collection sources and the reliability of the data collected. They also reviewed the data presented by other regions in the UK and ROI.

1.6 Review Team

The review was led by Helen McClure (Deputy Principal Statistician) with support from Michele McNally (Assistant Statistician).

2 Introduction

2.1 Introduction to the School Meals Census

On an annual basis SRT collects information, via the School Meals Census, on numbers of pupils taking school meals. This data collection exercise is a snapshot for all grant aided schools in Northern Ireland, and the reference point for data is usually the Friday of the first full working-week in October. This is usually the same date for the main School Census (school enrolments) data collection.

The School Meals Census gathers information in relation to the number of children taking school meals, either paid or free; those taking traditional meals or cash cafeteria; and those making other lunch arrangements. Information is also collected on adults having a school meal.

The uptake by pupils' information provided in the School Meals Census combined with information from the main School Census allows the production of uptake rates for school meals generally, and for free school meals by those with entitlement.

2.2 A brief history of the School Meals Census

The EA (formerly Education and Library Boards (ELBs)) is responsible for the day-to-day operation of the school meals service in all grant-aided schools, with the exception of voluntary grammar schools and grant-maintained integrated schools, where the responsibility lies with the Trustees/Boards of Governors. Up until 2010/11 the policy team in DE, now known as FIS Team, were collecting the data they required for monitoring and planning purposes from ELBs and individual voluntary grammar and grant maintained integrated schools.

Statistics and Research Team in DE became involved in the data collection and validation of School Meals Census data from 2010/11. The process involved the former ELBs collecting data from schools in the controlled and maintained sectors and providing a collated return for their area to the Department; the Department collected information directly from each voluntary grammar school and grant-maintained integrated School and combined this with the ELB returns.

To assist with quality assuring the data, for the 2011/12 year SRT requested individual school level data from each ELB, and for the 2012/13 year moved a step further by collecting the information directly from all schools. While this greatly improved consistency of the data and the ability to validate the data it did introduce an element of duplication in that from this point forward both DE and EA were collecting schools meals uptake data.

SRT continued collecting information directly from schools via a Microsoft Excel spreadsheet template that the school received by email, completed and returned by email until 2018/19 when SRT introduced a new online data collection application for schools.

The first statistical bulletin and statistical tables on School Meals in Northern Ireland was produced in relation to 2010/11 data. There have been some minor methodological changes over the years. All changes made have been documented in the 'Notes for Readers' within the statistical bulletin. There have also been some content changes made over the years, for example:

removal of ELB analysis as a result of establishment of the EA

 discontinuation of comparisons with data from other regions of the UK due to policy differences between the regions and availability of up-to-date information for other regions make comparisons difficult

For 2016/17 SRT began publishing statistical tables in Open Document format as well as in MS Excel. In 2017/18 SRT began publishing an infographic visual on an annual basis to accompany the statistical bulletin and tables. This is a one page, easy to read, set of key statistics from the bulletin.

2.3 The design of the School Meals Census

The School Meals Census collects aggregate school level data on pupil numbers and their meal arrangements for lunch on the day of census. It is a census rather than a survey so data collection is attempted, and usually achieved, from every grant-aided school. As well as data for pupils, some limited information is collected about uptake of school meals by adults in each school. The information is currently collected via an online application.

It is intended as a snapshot of meal uptake on a given day. While a reference date (census day) is provided there is some flexibility allowed regarding this date as it may not be a typical day for meal uptake for each school. Schools are asked to choose a day in the same week, if possible. Requests to schools to upload their data for census day are sent to the School Principal. Completion of the return is likely to involve consultation with school kitchen/catering staff. Some additional data is requested from the school to assist with data validation, for example, pupil enrolment, pupils present, and pupils not availing of lunchbreak.

2.4 Uses

The statistical outputs covered by this review mainly focus on data on uptake of school meals (free and paid) collected via the School Meals Census. Data on numbers of pupils enrolled, and numbers of pupils entitled to free school meals (FSME) are collected through the separate main School Census data collection and are reported in the statistical outputs associated with the main School Census. However, as calculation of uptake rates for meals generally and free school meals requires the enrolment and the entitlement data, these data are presented in summarised format in the statistical outputs on uptake of school meals. It should be borne in mind that some users of the School Meals Census statistical outputs may therefore use them only to access the FSME data which is not collected via the School Meals Census.

An online user survey ran from 7 February 2022 to 18 March 2022. DE FIS Team contacted key partners to make them aware of the survey and to encourage their feedback. The main findings from this survey are set out at Annex A. Six responses were received. Three responses were from DE, two responses from Academia and one response from the education sector. The main reason indicated for using the school meals uptake information was policy development and monitoring (4). Two of the respondents said they used it for academic research and one respondent indicated it was used for service planning and delivery.

FIS Team is the main DE user and a more in-depth discussion took place with them to inform the review. This indicated that they rely on the school meal uptake statistics for a number of areas:

- for financial planning and preparing business cases to secure funding
- to monitor progress against targets in EA business plan regarding uptake for paid school meals and free school meals

• for monitoring effect on school meal uptake of various policy or operational changes e.g. changes to nutritional standards, quality of food, menu changes, service changes, transport of food, and changes to criteria for free school meal entitlement

The EA was also thought to be a main user of the statistical outputs however, the findings from this review suggest otherwise. A discussion with the EA Catering team highlighted that they no longer use any of the DE school meal uptake data or statistical outputs. They do use pupil enrolment data and FSME data collected by SRT but do not use the statistical outputs covered by this review to access that information.

2.5 Response rates

As the school meals data collection is carried out as a census the aim is to achieve a 100% response rate. Occasionally this is not possible, for example due to strike action as school may decline to make a return. In such circumstances, SRT impute data for the missing school(s).

2.6 Relevance

This section of the review considers whether user requirements are met and identifies any aspects of the statistical outputs where improvements are needed.

All DE teams are consulted annually by SRT about data requirements, including any additional information to be collected or any data that is no longer required. This ensures that data meets the key users' needs. In addition contact details are also provided in the statistical bulletin for the relevant statistician, should a member of the public wish to offer any feedback directly or request further analyses of the data.

For the School Meals Census the EA Catering team are also consulted annually on the upcoming data collection and have an opportunity to discuss requirements.

The recent online user survey asked users to what extent the School Meals statistical bulletin and related products met their needs or those of their business area. Four respondents indicated that their needs were met mostly or completely while two respondents indicated that their needs were partly met. Almost all respondents found each of the outputs at least useful. The statistical bulletin was described as essential by one respondent and the statistical tables were described as essential by 2 respondents. While no-one found the infographic essential most respondents described it as very useful. One respondent though indicated that none of the statistical outputs were useful at all.

When asked what other products users would like to be made available responses can be summarised as follows:

- a desire for more infographics
- a move away from static to more dynamic data
- a desire for linked data where possible for example school meals uptake and canteen choice, alongside outcomes such as attendance/educational outcomes
- a desire for more data points
- a desire for additional breakdowns other than by school type

Action Point 1: Consider how the additional user requirements identified through the online survey can be met via any future data provision

When asked about different aspects of the statistical bulletin all users reported these aspects at least useful and some indicated that certain aspects were very useful or essential. When asked if there was any other analyses or commentary that they would like to see included one respondent expressed an interest in data about factors that impact uptake of FSM, how this varies by region, gender and age. Also a need for information on the meals selected or the nutrition quality of the meals in order to understand more about the nourishment the children are getting.

Action Point 2: Consider how any future data collection can provide data about factors that impact uptake of FSM, FSM uptake by region, gender and age, information on meals selected and nutritional quality of the meals

When asked about the statistical tables four of the six respondents indicated that they or their business area use the tables. All tables appear to be used by some users except table 10, which is about adults taking school meals.

More in-depth discussion with DE FIS Team about the relevance of the data for their business requirement indicated that they were generally content with what was currently available. They refer to the bulletin and tables to inform briefing material, answers to Assembly questions (AQWs), correspondence cases, etc. When asked about the potential removal of table 10 on Adults taking school meals they said that they could not recall using this information in the past but would prefer that SRT continued to collect the information in case it is required but have no issue with it being removed from the publication. They re-iterated the findings from the online survey that the infographic visual was particularly useful and they referred back to the information contained within this many times. While they sometimes had a need to access school level data on uptake or certain geographical breakdowns of the data they did not feel there was a need to include such information in the published products.

The EA Catering team do not find the DE uptake data useful as it refers to one point in time (census day) and is published around 6 months after the day it relates to, whereas the uptake data they collect allows them to calculate a daily average for each month. They have their own dashboards, updated on a monthly basis, enabling them to visualise change in uptake of meals. Historically SRT have sent EA Catering team additional analyses of the School Meals Census uptake data broken down by the former ELB areas. EA catering Team advised that these analyses are no longer required. They also advised that they have no need to receive provisional data from SRT in December.

Action Point 3: Discontinue production of additional analyses for EA

Action Point 4: Discontinue sending provisional data to EA in December

2.7 Accuracy and reliability

Coverage of the data is 100% of all grant-aided schools. While the data collected is merely a snapshot on a particular day, the value in the data arises from the extensive validation that is carried out by SRT statisticians. DE FIS Team acknowledged the quality assurance process carried out by NISRA and indicated this was something they were keen to maintain going forward.

Schools input their data into the online application. Validation checks are built into this in an attempt to mitigate against common mistakes. There is still potential for incorrect data to be submitted and SRT statisticians carry out a series of further validation checks including ensuring all

pupils are accounted for and that the figures total. Inconsistencies in the data are checked with schools and corrected where necessary. See Annex B for the data processing flowchart.

For schools with a cash cafeteria, the numbers taking cash cafeteria meals is an equated meals figure, which is schools calculate by taking the total income from lunch and break time sales and dividing by the fixed price of a traditional meal (set by the EA). Schools that provide an equated figure for cash cafeteria meals generally also estimate the number of pupils making other lunch arrangements, rather than provide an actual count of pupils.

The School Meals Census is intended to capture meal information on a specific day i.e. the Friday of the first full week in October. Where this is not a typical day for school meals the schools are permitted to choose an alternative day, preferably in the same week. Due to the nature of taking a snapshot on a specific day, there may be some natural under or over-coverage in particular categories i.e. school meal numbers may be lower when a class is on a school trip.

2.8 Timeliness, punctuality and frequency

Data are usually collected as of Census day in October each year. Final data are released in a statistical bulletin the following April. This time lag between data collection and publication of results arises due to the need to await extensive validation on school enrolment and free school meal entitlement data (from the main School Census). Both of these data are used in data validation of uptake figures and in the case of FSME also for the calculation of school meal uptake rates. There have been no instances of data not being released as per the planned publication date.

In the online survey half of the respondents indicated that they were satisfied with an annual frequency of publication. One respondent was dissatisfied with annual publication, which was expressing a desire for more data points. On asking whether the users were satisfied with an April publication date again half of the respondents were satisfied and one was dissatisfied. The comment was that the sooner the information was available the better but they did acknowledge that time is required to carry out the validation work.

Action Point 5: Consider if any future means of data provision would permit data availability more often than annually

Action Point 6: Consider if any future means of data collection could result in a shorter time period between data collection and publication of results

It is also important to consider potential efficiencies and cost savings. An obvious way of reducing costs is to reduce the frequency of the School Meals Census. In the online survey users were asked what impact there would be on their business area if uptake data was published every second year instead of annually. All respondents indicated that there would be some degree of impact and most said there would be a lot of impact. There was a strong desire expressed for regular, at least annual, data on uptake of meals. Anything less than this was deemed unacceptable as it would limit the quality of the data and the understanding that can be gained from it.

Further discussion with DE FIS Team indicated that an April publication date is acceptable but if there is any opportunity to get data published sooner they would welcome this. They were keen that a regular annual publication schedule is maintained and were concerned that a move to a 2 year publication schedule would limit their ability to effectively monitor the impact of policy changes. A reliance on older data was seen as less than satisfactory.

2.9 Accessibility and clarity

A summary of the key statistics are available via the statistical bulletin released in April each year. Data tables at a Northern Ireland level are available on the DE website. Many of these data tables include breakdowns by school type and management type. Data on free school meal entitlement are used to estimate the uptake rate of free school meals by pupils entitled. Previous years' data is included on the website also, so time series analysis is accessible.

If specific data are not available online, users are invited to request such data via email. These data requests are routinely answered within 15 working days. All data available are provided, where possible.

Web content is produced in such a way to be accessible to those who require assistive technology.

Results from the online survey indicate that most respondents were satisfied or very satisfied that the school meals uptake information is clearly presented and easy to access. Half of the respondents indicated that there is sufficient background information relating to the methodology and quality of the statistics. Two respondents said they did not know and one said there was not sufficient information. This respondent suggested it would be useful to explain why FSME is the preferred measure of deprivation and provide an update on work in this area.

Action Point 7: Consider what could be done to improve the background information and make it more easily accessible to users

Action Point 8: Consider if it is appropriate to include an explanation of why FSME is the preferred measure of deprivation and provide an update on work in this area. If not appropriate consider how this could otherwise be addressed.

Discussions with DE FIS Team indicated that they were content that there is good supporting information on methodology and quality of the statistics. They felt it was not easy to find the School Meals bulletin on the DE website unless you knew where to look and suggested the use of keywords to link the search engine to the school meals statistical page would be useful. They also highlighted that there could be an issue around the name of the data collection as it is known as the School Meals Census in DE and in schools but not referred to this in the published material. SRT also acknowledge that some schools find it confusing to have two SRT data collections running at the same time, with the same reference date, and also almost the same name – the School Census and the School Meals Census.

Action Point 9: Consider ways in which the data collection can be easily distinguished from the School Meals Census and also ways in which the information can be made more easily accessible on the DE website

2.10 Coherence and comparability

All data on school meals uptake is obtained directly from schools, thus guaranteeing coherence of the data.

While FSME data is collected at pupil level via the main school census data collection, this is made available at aggregated school level for the calculation of free school meal uptake rates. There is no user requirement from DE FIS Team to have free school meal uptake data available at pupil level

although there was a requirement expressed through the online user survey for data linkage which would require pupil level data on school meals uptake.

The reference date for this data is usually the Friday of the first full week in October. As the reference date for meals uptake can vary a little around this date on a school by school basis, the figures are not directly comparable but are close enough to provide a reliable estimate of free school meal uptake by entitled pupils.

The variables collected have been largely stable, and the methods used to collect the data have not changed to any great extent since the 2012/13 data collection, so data is comparable over time.

As education is a devolved issue the other UK administrations often have different approaches or different policies/criteria underlying data that is collected. This means that making direct comparisons between regions can be difficult. DE FIS Team indicated that there is currently a review underway of the criteria for entitlement to free school meals. It is possible that this could lead to a change in Northern Ireland that would bring it into line with other regions of the UK making comparisons possible.

2.11 Confidentiality, transparency and security issues

Aggregate data on school meal uptake is returned for each school so there are no confidentiality/security issues associated with returning pupil level data. Any potentially sensitive data relating to small numbers of pupils, are not published or released externally. For this data, any figures that are less than five are suppressed, and an adjacent figure in a column or row in any table with a total is counter-suppressed to avoid the potential identification of individual pupils.

DE FIS Team indicated that they are content that the methodology and processes are fully transparent and enough supporting data is available to understand any changes introduced and the reasons for these.

3 Data Collection

3.1 Cost to run the survey

SRT estimate the cost to carry out the data collection and publish the results at £16,780¹ in 2020/21. This is based on 10 days for Deputy Principal Statistician to oversee and quality assure, 40 days for Assistant Statistician to manage the data collection and 6 days for Executive Officer 2 for support to Assistant Statistician.

3.2 Respondent burden

Respondent burden is the effort, in terms of time and cost, required for respondents to provide their data.

The following data relating to school meals is collected annually:

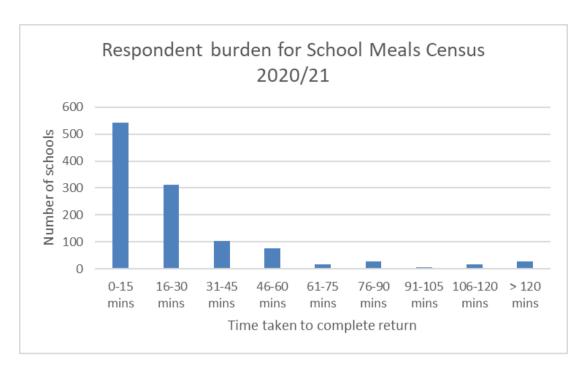
- Type of meal provision
- Number of pupils enrolled
- Number of pupils present on Census day
- Number of pupils present on Census day but not availing of a school midday break
- Number of pupils taking traditional meal paying
- Number of pupils taking traditional meal free
- Number of pupils taking cash cafeteria meal paying
- Number of pupils taking cash cafeteria meal free
- Number of pupils making other lunch arrangements
- Number of adults taking school meal paying
- Number of adults taking school meal free kitchen staff
- Number of adults taking school meal free midday supervisors

As part of each School Meals Census data collection all schools are also asked to indicate how long it takes them to make their return. The average time taken by schools to make a return in 2020/21, the latest information available, was 30 minutes. In monetary terms, this translated to an average of £8.42 2 per school. The results from each school varied considerably and reasons for this are not known but could be such factors as the size or type of each school or the salary level of the member of staff completing the return.

It is known though that some schools have to enter their school meals data more than once where they have not noticed an error message, assumed that their data was submitted, and closed down the application, resulting in data not being saved. In such cases schools may be reporting the cumulated burden of multiple attempts.

¹ Based on DoF Ready Reckoner 2020-21-1 Sept 2020-31 July 2021

 $^{^2}$ Based on 2020 annual estimate (provisional) of hourly pay (excluding overtime) for UK employees by four-digit Standard Occupational Classification (Table 14.6a)



Action Point 10: Undertake some research with schools to identify why there is such variation in response burden. Ascertain if there are any issues relating to guidance, instructions or the data collection instrument that are leading to a higher response burden for some schools.

3.3 Data collection management

The Assistant Statistician manages the data collection. The steps involved are as follows:

- i. Contact each school by email to make them aware that they will soon receive the request to complete the School Meals Census.
- ii. Create an individual password for each school with their DENI school reference number as the corresponding username.
- iii. Submit online request to IT to refresh the School Meals Application of all previous data, update all relevant dates and all other notes and incorporate the new school list and password information.
- iv. Issue an individual email to each school using Macros containing a link to the online application, login details, instructions and guidance.
- v. As responses come in export data in batches and run automated SPSS validation checks on exported data. If any records are flagged for checking, contact the school (usually by email) for an explanation and/or ask for errors to be rectified on their submission.
- vi. Once the deadline is passed issue reminder emails to any schools that have not submitted attaching the original information.
- vii. After a further 2 weeks begin phoning remaining schools to remind them to submit and assist where necessary.

Discussion with the Assistant Statistician highlights a number of potential issues worthy of further investigation to make the process of data collection smoother. There is some evidence to suggest that some schools do not receive the email asking them to complete the School Meals Census. Emails are issued to the official school email account and often schools say they do not use that account. However, this is not always the case. It is possible that some schools are so busy they just

miss the email coming in but it would be worth checking if there could be an issue when sending out the emails via the automated process.

Action Point 11: If this same methodology is employed in the future investigate if there is a better way of alerting schools to the data request

The Assistant Statistician spends a substantial amount of time on quality assuring the data collected at this initial stage. While there are automatic validation checks built into the application it is not possible to check everything automatically therefore the Assistant Statistician periodically runs checks on data received and makes contact with schools to clarify the data/seek amended data, where necessary. This contact with schools is mainly via email which results in an audit trail of what was discussed and agreed. This is where the bulk of the Assistant Statistician's time is taken up on the data collection.

Administrative support is generally limited and involves ringing schools that have not submitted a return and re-issuing original requests to these schools. Arguably there is a role for administrative staff to be more involved in the quality assurance aspect at this early stage. However, the timing of the data collection falls at the same time as that of the main School Census data collection and that is where the priority tends to be for the available SRT administrative resources. Schools are also focused on making their main School Census return at this time with the School Meals Census return taking a back seat.

Action Point 12: Consider if there is potential to carry out any future data collection at a different time period to take some of the pressure of schools and to take advantage of the limited resources available in SRT to support the data collection.

The Deputy Principal Statistician oversees the project. This includes ensuring the work proceeds as planned and quality assuring the data and outputs. Depending on the experience of the Assistant Statistician in this work area the DP role can also include providing ongoing assistance and training/guidance to the Assistant Statistician throughout the data collection.

3.4 Guidance and instructions

Instructions and guidance notes are issued to schools by email along with the weblink and password details to access the online application to complete the school meals uptake census. SRT review the guidance annually in an attempt to address any new or recurrent issues experienced by schools as they complete their return to DE. For example, SRT have a current action to review the guidance regarding how schools should count pupils present or pupils attending another school or college on Census day, as some schools currently find the information provided vague.

The guidance ranges from instructions on how to logon, how to deal with alerts and critical errors, how to save and submit the return, a checklist of things to consider before submitting the return and reference notes to accompany the data entry fields.

While the guidance has been built up over the years and is thought to have significantly reduced the number of problems experienced by schools or errors arising with their data, there is evidence that some schools do not read or understand the guidance. It is difficult to achieve a balance between too much information which could put schools off reading it and too little information which results in more schools contacting DE for assistance/clarification.

It would be useful to get feedback from schools on this issue to identify if there any improvements that could be made.

Action Point 13: Seek feedback from school on guidance and instructions that accompany request for their data.

3.5 Web data collection (the App)

The School Meals Census data collection is currently run as public facing Internet application designed to capture information from certain staff members in schools. It takes the form of a survey questionnaire, which then stores responses in a database. Application access is controlled by a password that is emailed to individual participating schools. After the exercise is complete, the captured data is exported as a spreadsheet.

The application was developed in house by DE IT support. The Platform is C# running on Microsoft .NET 4.0 Webforms and the Database is Microsoft SQL Server.

The application was introduced for the 2018/19 data collection and while small refinements have been made since then the application is largely unchanged. On an annual basis the app needs refreshed, i.e. cleared of all existing data, minor wording/date changes, and updated with latest school list and passwords. The functionality for this refresh to be carried out by SRT was built into the system at the outset but the first SRT reset was not completely successful and as a result the refresh requires intervention by IT support. There is an application process in place to request any updates to the existing system.

Despite refinements to the app and the guidance that accompanies the data request SRT are aware of a number of issues still experienced by some schools when completing the school meals uptake census which give rise to the majority of calls/emails/queries from schools. These include the following:

- Weblink not opening some schools cannot open the link by clicking on it so they copy and
 paste this link into the Google search bar which does not come up with the correct webpage.
 Schools should copy and paste this link into their internet browser to bring them directly to
 the webpage. This is explained in the guidance instructions.
- Email/Pasting issue with passwords when schools copy over their password sometimes it copies over a space at the end which does not allow them to log in.
- When errors occur progress doesn't save for example, when a school doesn't fill in a required section of the questionnaire or the number of meals and other arrangements do not equal the number of pupils present an error/warning appears at the top of the page. Some schools do not notice this so when they hit the submit button they don't realise their data has not been submitted but assume it has. They then close the application down but in this case progress is not saved. SRT sees this as not submitted but school knows they have completed the return and thinks they have submitted.
- Due to the validation in place within the app nursery schools with no meals service are
 prevented from submitting data for break snacks. The data can be recorded by SRT outside
 of the app but this relies on these schools contacting SRT, or SRT may pick this up during
 validation comparing with previous years data and contact the school to obtain the data.

Action Point 14: Raise these application issues with IT support again when requesting a refresh to see if there is anything that can be done to improve the user experience

4 Processing

The main steps in the statistical production process are mapped out at Annex B.

4.1 Imputation

Missing data is a rare occurrence but occasionally does arise. If the missing data is for a school for which EA catering team include in their data collection then this will be the source to populate the data. If the data is not available from the EA then values will be calculated based on data returned for the school in a previous year. Details of any imputation are reported in the statistical bulletin.

4.2 Validation checks

The data is subjected to basic quality checks at the point of capture in the online application. Further automated validation checks are run in SPSS at intervals on submitted data. Any schools failing the SPSS validation checks are exported to Excel and worked through individually. Finally once all data has been submitted further validation checks are run in SPSS.

The checks include basic arithmetic checks and comparison with previous years return. Specifically, some of the validation checks SRT run include:

- The meal type (traditional, cash cafeteria, combined or no service) is the same as last year;
- The number of pupils taking a free or paid meal is only zero if the meal type is recorded as no service;
- Pupils not availing of a midday break are recorded if a number were recorded last year;
- The number of total pupils taking a meal, other arrangements and not availing of a midday break is not greater than the number of pupils present for lunch. Should be equal if traditional meal type is selected;
- Figure recorded under free meals, paid meals, other arrangements and adult meals should be similar to the figures recorded last year.

The Assistant Statistician makes changes to the data as a result of the data validation process. All changes are communicated and agreed with the school. All changes are also reviewed by Deputy Principal Statistician. Once all checks have been completed and data amended as required the data is saved as provisional data.

The provisional data is sent to the EA catering team for their use and they are also asked to carry out a quality assurance check. Recent discussions with EA catering team though have highlighted that they no longer require this provisional data and the extent to which they carry out quality assurance of the data is minimal.

Once the main School Census data collection is finalised and published data on enrolment numbers and FSME numbers for each school are used in the final stage of validation for school meals uptake. A small number of schools may need to be contacted at this stage to clarify/amend their data.

The data is then finalised and a number of additional variables are derived from the original data collected. The data is saved as an SPSS dataset.

4.3 Risk and Mitigation

There are a number of risk points for error in the process. However, measures have been put in place to mitigate against these as follows:

- Detailed guidance and instructions issued to schools
- Built in validation checks on the online data collection instrument some are alerts for data to be checked before submission, some are critical errors which prevent data being submitted unless corrected
- The requirement for school return to be signed off by both School Principal and Catering Manager
- 2 stage validation process running automated SPSS code checks
- Scrutiny and follow up where necessary by SRT statistician of individual records failing SPSS automated checks
- All changes to original data confirmed with school
- All changes made by first SRT statistician checked and confirmed by second SRT statistician
- EA quality assurance check of provisional data (although information gathered through this review has highlighted that this check has become minimal)

5 Reporting

5.1 Statistical outputs

SRT create 3 statistical outputs each year following the school meals data collection. These include the statistical bulletin, tables (published in both Excel and OpenDocument Spreadsheet format) and an infographic visual. The published statistics not only show the interpreted data from the current year's results but also a comparison to previous years.

Please click on the following links below to learn more about each published output.

Bulletin - DE Website

<u>Tables - Excel Download</u>

Infographic - DE Website

5.2 List of tables and charts

- Table 1 Number and type of meals taken on school meals census day, by school type and school management type
- Table 2 Percentage and type of meals taken on school meals census day, by school type and school management type
- Table 3 Uptake of school meals (free and paid) number and percentage of pupils present for lunch on school meals census day, by school type and school management type
- Table 4 Number and percentage of school meals provided (free and paid) by type of meal provision, school type and school management type
- Table 5 Uptake of school meals (free and paid) number and percentage of pupils present for lunch on school meals census day, according to relative free school meal entitlement, by school type
- Table 6 Number and percentage of pupils entitled to free school meals by school type
- Table 7 Number and percentage of pupils entitled to free school meals, by school type and school management type
- Table 8 Number and percentage of pupils taking free school meals as a proportion of all school meals provided and as a proportion of pupils entitled to free school meals, by school type and school management type
- Table 9 Uptake of free school meals number and percentage of pupils entitled to free school meals, by school type
- Table 10 Adults taking school meals, by school type: 2020/21
- Figure 1 Uptake of school meals (free and paid), by school type
- Figure 2 Uptake of school meals (free and paid) in primary schools, according to relative free school meal entitlement
- Figure 3 Uptake of school meals (free and paid) in post-primary schools, according to relative free school meal entitlement
- Figure 4 Percentage of pupils entitled to free school meals
- Figure 5 Uptake of free school meals, by school type

5.3 Automation of reporting

SRT use SPSS code to automatically run all relevant tables and use these to update the school meals bulletin (MS Word), the statistical tables (MS Excel and OpenDocument Spreadsheet) and the infographic visual. Accessibility is checked and any issues are amended before being converted to PDF for publication on the DE website. Generally, it takes from October to April (approximately 6 months) to prepare, collect data, validate, run statistical analysis and publish the School Meals Statistical Bulletin.

Government guidance now recommends the use of HTML over PDFs to ensure information is as easy as possible to find and use. Compared with HTML content, information published in a PDF (created for printing and not screen use) is harder to find, use and maintain. More importantly, unless created with sufficient care, PDFs can often be bad for accessibility and rarely comply with open standards. SRT have recently worked with the NISRA Tech Lab to automate and convert another PDF bulletin, relating to enrolments in schools, to a more interactive/accessible HTML version.

The main aim of the project was to automate the process to reduce the time spent producing bulletins, reduce the risk of errors while increasing accessibility. Code was written, data analysed and a report generated in R markdown. Line charts within the bulletin were generated using plotly, which produces interactive html graphics, users may hover over the graph to see the actual figures. These actual figures may also be downloaded by users by clicking a button. Links to other relevant data/sites can also be included in the HTML to increase ease of access. The HTML doc is published on the NISRA Data Vis server and this is linked back to the DE website. Now that this code/processes have been developed it will just need slightly updated each year (i.e. dates and any variable name changes) and the bulletin will be produced automatically. This is also the case for any revisions.

A similar process has also been used to automate the production of multiple Infographic visuals, thereby reducing the risk of errors while increasing accessibility. Code was written, to bring data into R, analyse it and export spreadsheets. Reports were created in PowerBI using data in the spreadsheets, which can be used internally as a dashboard or externally as PDFs (the need for suppression made it difficult to have an external dashboard). These reports can be updated annually by running the R code and refreshing the data sources in PowerBI.

Based on the success of this project SRT will also now move to convert the School Meals bulletin to HTML version and automate the production of the infographic visuals.

Action Point 15: Convert bulletin to interactive/accessible HTML version and automate the production of infographic visual.

5.4 Revisions

Statistical revisions and errors are handled in line with the Statistical Revisions Policy:

DE Website - Statistical Revisions Policy

6 Action arising from review of 2020/21 data collection methodology

6.1 Action required

Following this review of the 2020/21 data collection methodology and an assessment of current and future needs of users the following action points have been recorded:

	Constitution that the additional control to the state of the state of the state of	number
	Consider how the additional user requirements identified through the online	10
	survey can be met via any future data provision.	
	Consider how any future data collection can provide data about factors that	11
	impact uptake of FSM, FSM uptake by region, gender and age, information on	
	meals selected and nutritional quality of the meals.	
	Discontinue production of additional analyses for EA.	11
	Discontinue sending provisional data to EA in December.	11
	Consider if any future means of data provision would permit data availability	12
	more often than annually.	
6 (Consider if any future means of data collection could result in a shorter time	12
	period between data collection and publication of results.	
7 (Consider what could be done to improve the background information and make	13
i	it more easily accessible to users.	
8 (Consider if it is appropriate to include an explanation of why FSME is the	13
l 1	preferred measure of deprivation and provide an update on work in this area. If	
l i	not appropriate consider how this could otherwise be addressed.	
9 (Consider ways in which the data collection can be easily distinguished from the	13
9	School Census and also ways in which the information can be made more easily	
i	accessible on the DE website.	
10	Undertake some research with schools to identify why there is such variation in	16
	response burden. Ascertain if there are any issues relating to guidance,	
l i	instructions or the data collection instrument that are leading to a higher	
	response burden for some schools.	
11 I	If this same methodology is employed in the future investigate if there is a	17
	better way of alerting schools to the data request.	
12 (Consider if there is potential to carry out any future data collection at a	17
	different time period to take some of the pressure of schools and to take	
	advantage of the limited resources available in SRT to support the data	
	collection.	
13	Seek feedback from school on guidance and instructions that accompany	18
	request for their data.	
14	Raise these application issues with IT support again when requesting a refresh	18
	to see if there is anything that can be done to improve the user experience.	
	Convert bulletin to interactive/accessible HTML version and automate the	22
	production of infographic visual.	

7 Looking at other regions of the UK and Ireland

7.1 England

England collects data on free school meal eligibility through their school census. Official statistics from the Spring census are typically published annually in a National Statistics release. Data on free school meal eligibility is collected in the Autumn census but not routinely published.

There is no regular statistical release or research covering uptake of school meals.

7.2 Scotland

In Scotland registrations for free school meals are collected as part of the school Pupil Census undertaken in September of each year. This is the primary source of data on free school meal registrations.

Data on the number of free and paid for school meals taken over a financial year is collected by the Scottish Government as part of a collection of finance data from local authorities. The data is released as background data for the local government finance statistics in the education data workbook LFR01:

Scottish Government Website - Statistical Publications

Scotland also carries out the Healthy Living Survey (HLS), an annual survey in February each year of all publicly funded schools in Scotland. It contains information on registration for free school meals (FSM), uptake of school meals (both free and paid for), and also Physical Education.

Scottish Government Website - School Healthy Living Survey statistics: 2020

The findings present information by school sector. Additional information is available on school meals by local authority, Urban Rural classification and size of school. School level information on school meals is also available.

7.3 Wales

Wales produces a number of annual statistical reports online using the data derived from the Pupil Level Annual School Census returns supplied by schools open on Census day in January. This includes uptake of free school breakfasts, pupils eligible for free school meals, pupils taking free school meals on census day and pupils receiving milk.

Welsh Government Website - Provision of meals and milk

7.4 Republic of Ireland

Only statistics on expenditure on school meals are published through the Department of Social Protection Annual Report. There are no statistics published in relation to uptake. An evaluation of the school meals programme is underway with a final report expected in November 2022. As part of the evaluation the provision of school meals in other countries is being examined.

ROI Government Website - Annual Report 2020

8 Review of 2021/22 data collection methodology

8.1 Background

For the 2021/22 academic year, the Department requested SRT to suspend the School Meals Census in order to divert analytical resources to other priorities. In the absence of 2021/22 uptake data from SRT, DE FIS Team instead asked the EA to provide information on uptake of school meals.

8.2 Methodology

It was agreed that the EA catering team would provide information from their existing data collection with an add on exercise by another EA team to collect data from the voluntary grammar (VG) and grant-maintained Integrated (GMI) schools not currently covered by the EA school meals service. EA agreed to provide the following data for each school:

- DENI school reference number (7 digit)
- Free school meals taken on 5 November 2021
- Paid school meals on 5 November 2021
- Adult free meals for kitchen staff on 5 November 2021
- Adult free meals for midday supervisors on 5 November 2021
- Adult paid meals on 5 November 2021

SRT agreed to obtain and add on the following information:

- Pupil enrolment on Census Day³ (8 October 2021)
- FSM entitled pupils on 5 November 2021
- Cumulative attendance rate Sept-Oct 2021 (this is not available for nursery schools)

SRT agreed, if possible, to estimate/derive the following information:

- Pupils present on Census Day
- Pupils present for lunch on Census Day
- % free school meal uptake by pupils entitled to free school meals
- % school meal uptake rate by all pupils present for lunch

Pupils present on Census Day is collected via the School Meals Census but was not collected by the EA for 2021/22 so therefore needed to be estimated. The School Meals Census also asks how many pupils were present but not availing of a midday lunchbreak on Census Day which allows the variable pupils present for lunch to be derived. Again this was not collected by the EA for 2021/22 so had to be estimated.

To estimate pupils present on Census Day SRT used the cumulative attendance rate for September-October 2021. This was available as a percentage for each school, excluding Nursery schools, and was applied to the 2021/22 total pupil enrolment figure for each school. For Nursery schools the School Meals Census data for the previous 3 years was used. The total number of pupils present on

³ Cens us day was 8 October 2021 but due to a large number of late or incomplete free school meal applications, DE and the EA agreed to an extension to the date used for the purposes of assessing schools' Free School Meals entitlement numbers. Normally children must be entitled on Census day but this was extended to 5th November.

Census day in Nursery schools was calculated as a percentage of pupils enrolled. The 3 year average figure was 90% and this was applied to 2021/22 enrolment figure for each Nursery school.

To calculate pupils present for lunch on Census day SRT calculated a 3 year average for each school type of the number of pupils present for lunch as a percentage of pupils present. These average percentages were then applied, to the estimated number of pupils present, for each school within the school type.

8.3 EA data on school meal uptake

SRT received data from EA in late February 2022. A preliminary examination by SRT identified that additional data cleaning and manipulation was required to prepare the data for merging with other SRT data. This work by SRT then highlighted a number of issues that needed to be resolved by EA before further progress could be made. At the end of April 2022 EA provided revised data. Some further work was required by SRT to prepare this for merging. While some issues still remained SRT were able to produce estimated uptake rates for school meals and free school meals by entitled pupils, albeit with the proviso to 'treat with caution'.

It is important to note that SRT did not validate this data. SRT did not have the resources to do this in 2021/22. SRT input was limited to ensuring every grant aided school was included once and referenced by DENI school reference number on the EA list so that additional SRT data could be added on. This included:

- Removing anything that wasn't a grant aided school (e.g. EOTAS, independent schools)
- Replacing 5 digit reference numbers for GMI schools with DENI 7 digit reference numbers by looking up school name on DE Schools+ database
- Associating and combining Nursery Unit data with relevant Primary school data
- Associating and combining data for multiple sites under one DENI reference number
- Identifying erroneous DENI reference numbers and replacing with correct number
- Identifying school name to DENI reference number mismatches and bringing these to EA attention for further investigation
- Identifying missing schools and bringing these to EA attention

In the final dataset SRT identified 28 schools either missing from the list or included on the list but with zero for free and paid meals for pupils where, based on previous years, we would have expected there to be meal numbers. We are aware from the EA notes that there were 3 non-responders and 1 school was closed on Census Day.

The estimated uptake rates for school meals and free school meals for 2021/22 were sent to FIS Team on 31 May 2022. SRT highlighted to FIS Team that the uptake rates are not directly comparable with data for previous years and should be treated with caution. SRT also attempted to quantify the impact of the missing data for the 28 schools.

8.4 Points to note

In reviewing the process for producing the 2021/22 uptake rates based on EA data and also based on the discussion with EA catering team as part of this wider review of uptake statistics, the following points are worthy of note:

- There is duplication for schools in information provided for EA Catering team's routine data collection and DE SRT School Meals Census. However, the EA data collection does not currently cover all grant-aided schools or collect the full range of data captured in the School Meals Census
- EA do not validate any meals data and there is no requirement to do so. Meal figures provided to them are gathered directly from catering staff. There is no input or sign off from the School Principal.
- EA do not collect returns referenced by DENI school reference number. For the 2021/22 data collection exercise EA needed to retrospectively add DENI school reference numbers to their data collected to enable SRT to merge on data from school Census. It is possible that there is not 100% accuracy in this respect.
- EA Catering team's routine data collection only includes schools (and other organisations such as EOTAS) where EA catering deliver meals. This excludes VG schools and most GMI schools (they currently deliver in 15 GMI schools) and any schools where there is PPP private catering. SRT School Meals Census requests a return from all grant-aided schools regardless of service provider.
- There is another team in EA who are responsible for VG and GMI school data. They routinely
 collect meal uptake estimates termly from these schools. For the purposes of the 2021/22
 uptake data collection for DE they had to carry out a special exercise to gather the
 information required.
- EA kitchens collect daily data on meal numbers, which is submitted to EA on a monthly basis. EA produce a daily average for the month (total meals taken that month / number of school days in that month) and they feel that this daily average available on a monthly basis is preferable to SRT data relating to one day as a snapshot, updated annually, and published around 6 months after the reference date.
- EA catering team collect returns from sites rather than from schools. One site can supply multiple schools/organisations.
- EA catering team receive returns from independent schools and EOTAS which are currently collected as part of the school meals census.
- For the DE 2021/22 exercise EA needed to extract data for one specific date from data in 10+ different formats which need to be edited to bring each school to the same format. EA suggested that a daily average figure for either October or November using their monthly figures would be easier for them to extract and also potentially a better figure to use for calculating uptake rates. Selecting data from a specific day is currently complicated and requires a lot of extra work.
- EA have spent significant time developing a new stock management sheet that would enable all data to be reported in the same way. This was piloted and feedback sought. However the system is currently on hold.

9 Options for delivering uptake data

The context for this review is that DE requested SRT to suspend the 2021/22 School Meals Census in order to divert analytical resources to other priorities. It is possible that such a scenario could happen again in the future. Also that in recent years, a minority of school principals have questioned the need for the annual School Meals Census data collection, or indicated that there is duplication of effort as similar information is made available to the EA Catering Team. The information collected in this review confirms that there is a degree of overlap and if possible we would wish to remove any duplication of effort.

Given this context it was considered prudent to explore any alternative ways of delivering uptake data that could meet the needs of users. While most respondents indicated that their needs were met mostly or completely through the existing products there were some additional suggestions to enhance the current provision:

- more infographics
- more dynamic data (e.g. the ability to drill down into the data rather than a standalone bulletin)
- linked data where possible for example school meals uptake and canteen choice, alongside outcomes such as attendance/educational outcomes
- data available more frequently than annually
- additional breakdowns other than by school type
- data about factors that impact uptake of FSM, how this varies by region, gender and age
- data on meals selected or the nutrition quality of the meals in order to understand more about the nourishment the children are getting.
- information available sooner
- more background information on the methodology and quality of statistics
- improved accessibility on the DE website

These suggestions from users as well as the desire to remove any unnecessary duplication are what informs the following paragraphs on options for future data provision.

9.1 Option 1: Continue with the annual School Meals Census

This option is to continue with the annual School Meals Census carried out by SRT, while taking on board as many as possible of the actions and user suggest made through this review.

Pros

- Consistency
- Data validated by NISRA statisticians producing Official Statistics
- Some improvements to outputs can be considered more infographics, more background information, improved interactivity/accessibility on DE website
- Some improvements can be considered to data collection process improvements to web application/data collection instrument, guidance and instructions, communicating with schools
- Some SRT savings can be realised through elimination of unnecessary analyses for the EA

Cons

- There would still be duplication of effort for schools completing the School Meals Census as well as providing data to EA catering team
- There is a risk that DE would suspend the School Meals Census again in future in favour of work deemed to be higher priority
- Many of the suggestions from users to enhance the current provision could not be considered – more dynamic data, linked data, more data points and data available sooner, additional breakdowns, more information on factors affecting uptake, choice of meals and nourishment of meals.

To reintroduce the DE School Meals Census for 2022/23, and assuming that resources are available to do so, SRT would need to submit a request for change to the web application through the IT Assist Ivanti service desk. Before doing so SRT would need to take forward the actions identified in this review relating to the web application/data collection instrument so that any improvements can be implemented for 2022/23.

There are a number of other actions around the data collection process itself that SRT would need to take forward prior to the next School Meals Census, ie over the next 4 months. Further actions, related to outputs, can be taken forward over a longer timeframe, aiming to be completed by the time the next set of results are published in April 2023.

Some enhancements to current data provision will not be possible via this option.

9.2 Option 2: Discontinue the School Meals Census and rely on EA uptake data

Pros

- Potential cost and time savings for SRT
- Removes duplication of effort for schools and potentially conflicting sources of same data
- Reduces the burden on schools, especially at a time when they are busy providing their main
 School Census data
- Meets the user need for more data points as EA produces daily average on a monthly basis
- Meets the user need for data to be available sooner

Cons

- EA data does not cover every grant aided school
- EA data is not validated
- EA data is management information and is not released in a statistical bulletin
- Additional work required to by EA to prepare outputs fit for DE purposes
- Uncertainty around whether any of the additional user needs could be met from EA data

Through SRT working with EA data to create uptake rates for 2021/22 it is clear that this is a possible way forward. There are some issues though that would need to be resolved:

- On an ongoing basis can EA collect data from schools where they do not provide a meals service or should DE collect this separately?
- Can EA capture DENI reference number against each return so they can easily report on this basis to DE without retrospective matching which is a potential source of error?
- Will SRT continue to have a role in validating the data and how would this work in practice?
- Who will publish the uptake statistics and what will the status be, ie management information, experimental statistics or official statistics?

Discussion took place with a Data Manager in the Continuous Improvement Team of the EA. EA were recently designated as a producer of Official Statistics and there is work currently ongoing to improve data governance and data quality and to work towards the production of Official Statistics at some point in the future. EA are also implementing the EDIS system (expected implementation April 2024) which will replace some existing EA systems and allow for better data integration and streamline the systems in which EA collect their data, as data currently comes from multiple systems and formats. There is also some work ongoing to review the use of the DENI school reference number.

SRT is hopeful that with the implementation of EDIS and other data improvements in EA at some point in the future it would be possible for DE to obtain school meals uptake from EA without carrying out a separate DE data collection.

9.3 Option 3: Collection via the main School Census

9.3.1 School Level Collection

This option is for school meals uptake data, at school level, to be collected as part of the main Census rather than as a separate exercise. H files and HS files contain data that is collected via Census at school level. This includes in and out migration figures and data for LSCs within schools. So potentially it would be possible to collect aggregate school meals census data on the system and upload for SRT.

Pros

- Same data can be collected so a degree of consistency
- Data will continue to be validated by NISRA statisticians producing Official Statistics
- Some improvements to outputs can be considered more infographics, more background information, improved interactivity/accessibility on DE website

Cons

- Need to develop a new data collection process with School Census to collect same data as before, and communicate this to schools
- There would still be duplication of effort for schools providing data via the School Census as well as providing data to EA catering team

 Many of the suggestions from users to enhance the current provision could not be considered – more dynamic data, linked data, more data points and data available sooner, additional breakdowns, more information on factors affecting uptake, choice of meals and nourishment of meals.

We would want to avoid delaying main Census returns if school meal uptake is collected for census day. Schools are advised to choose a date within the same week if the cannot collect on census day for any reason. However, sometimes schools choose a date later than census day which could cause further implications in delaying census.

There would be a lead in time to have changes made to the School Census so the earliest this could be done would be for 2023/24.

There appears to be little merit in taking forward this option over Option 1. This option will deliver the same outcome as Option 1 with some additional developmental work required to achieve it. There are no other obvious benefits of this option.

9.3.2 Pupil Level Collection – all pupils or FSME pupils only

This option is for school meals uptake data, at pupil level, to be collected as part of the main Census. This would require finding out what each pupil did for lunch on Census Day as well as what type of lunch provision was in place for the school. To match with current data an indication of pupils present for lunch on Census Day would also be required. The option is for the data to be recorded for all pupils in order to match outputs from the School Meals Census but it could also be recorded for only FSME pupils.

Pros

- Data validated by NISRA statisticians producing Official Statistics
- Richer data (at pupil level) would allow better data provision to meet user needs (data linkage and additional breakdowns in outputs)

Cons

- There would be an increased burden on schools to provide school meals uptake information at pupil level; this would be in addition to aggregate data being provided to EA catering team
- There would be development work required to put the data collection in place and communicate this to schools.
- Due to the need to validate pupil level data this could require more work by SRT and lead to a delay in publishing results unless more resources were available.

While it may be possible to collect pupil level data for school meals uptake for census day (or around that date) this may not be the best way forward. The main issue is the increased burden to schools of recording the meal arrangement for every pupil on Census day. This would be in addition to returns being made on a monthly basis to EA catering Team. There would also be an additional resource required by SRT to implement the new data collection and to validate the pupil level data.

The resulting data would be richer and meet some of the user requests for additional data but there was no demand for pupil level data from DE FIS Team.

If data was only collected for FSME pupils it would allow richer data for analyses of this group while being a lesser burden for schools to capture the information, although it is difficult to imagine how this could easily be done in some schools. However there would still be a need to continue with an alternative means of data collection for all pupils therefore the overall burden on schools would still be much greater.

10 Conclusions and Recommendation

10.1 Conclusion

The objective was to review the statistics currently produced by DE on uptake of school meals and to consider what changes are needed to best meet current and future user needs. The review was carried out in the context of a suggestion that there was duplication of effort by schools as similar information is made available to the EA Catering Team. The review therefore examined the extent to which there is duplication and whether there are any opportunities to reduce the burden on schools as data suppliers.

The review considered the usual data collection methodology known as the School Meals Census (last carried out in 2020/21) and, in consultation with users about their current and future needs, arrived at a set of actions points for moving forward. Many of these actions are changes within the usual data collection methodology. However, all user needs could not be met through this methodology and can only be met through a different way of collecting the data.

The review considered the potential to use other data sources (EA) and data collection methods (School Census) to maximise quality and efficiency and reduce duplication of effort and burden on schools. Each of the options considered had both advantages and disadvantages and each allow for some of the additional user requirements, identified through this review, to be met. No one option allowed for all the additional user requirements to be met.

The one option considered to have the most potential is Option 2 to discontinue the School Meals Census and rely on EA uptake data. This option was included following the outcome of the exercise taken forward for 2021/22 when EA supplied meals uptake to Food in Schools Team instead of data being provided via the School Meals Census. Estimated uptake rates for school meals and free school meals were able to be produced for 2021/22, albeit with some caveats.

Beyond an obvious resource saving for the Department if SRT no longer need to take forward the School Meals Census this option also has the benefit of removing duplication of effort for schools and potentially conflicting sources of same data, reduces the burden on schools, meets the user need for more data points and for data to be available sooner. However, some issues would need to be addressed to make this a viable option around coverage and quality of the data. Developments within the EA such as the implementation of EDIS and the designation as a producer of Official Statistics should allow for these issues to be raised and considered going forward.

10.2 Recommendations

Recommendation 1: Resources permitting, SRT should reinstate the School Meals Census for 2022/23. In doing so SRT should consider the action points recorded within this review and progress anything that can be readily taken forward under the existing data collection methodology in order to enhance the user experience.

Recommendation 2: SRT should take the lead in discussions with Food in Schools Team and the Education Authority on how data currently gathered on school meal uptake can be enhanced in

terms of coverage and quality to meet DE requirements, and that of other users from 2023/24 onwards.

Annex A: Northern Ireland School Meals Uptake Statistics – User Survey Results

https://consultations.nidirect.gov.uk/de/school-meals-user-survey

This report was created on Thursday 21 April 2022 at 10:26 The activity ran from 07/02/2022 to 18/03/2022 Responses to this survey: **6**

1. Please enter your contact details (optional)

Name

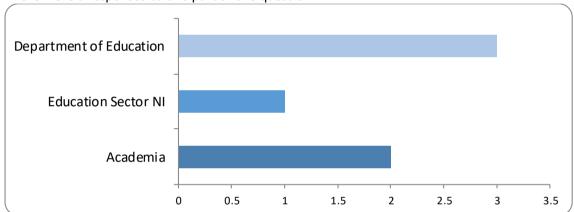
There were 4 responses to this part of the question.

Organisation

There were 4 responses to this part of the question.

2. Which of these best describes you/your organisation as a user of school meals uptake statistics?

There were 6 responses to this part of the question.



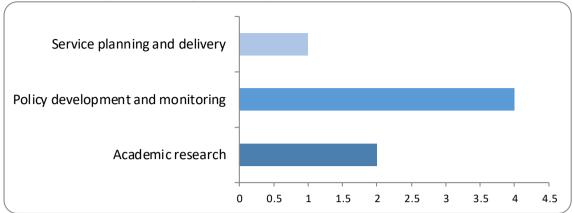
Option	Total	Percent
Department of Education	3	50.00%
Education Sector NI	1	16.67%
School	0	0.00%
Other Government Department	0	0.00%
Local Council	0	0.00%
Voluntary Organisation	0	0.00%
Academia	2	33.33%
Business	0	0.00%
Personal use	0	0.00%
Other	0	0.00%
Not Answered	0	0.00%

(Please specify)

There were 0 responses to this part of the question.

3. What do you or your business area use the school meals uptake information for? Select all that apply.

There were 6 responses to this part of the question.



Option	Total	Percent
Service planning and delivery	1	16.67%
Policy development and monitoring	4	66.67%
Academic research	2	33.33%
Personal interest	0	0.00%
Other	0	0.00%
Not Answered	0	0.00%

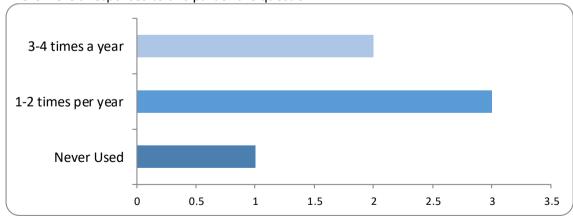
If other, please specify below:

There were 0 responses to this part of the question.

4. How often do you or your business area use school meals uptake information from the following products?

How often - School Meals Statistical Bulletin

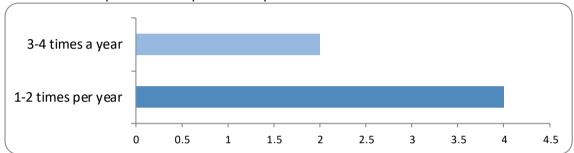
There were 6 responses to this part of the question.



Option	Total	Percent
Weekly	0	0.00%
Monthly	0	0.00%
3-4 times a year	2	33.33%
1-2 times per year	3	50.00%
Never Used	1	16.67%
Not Answered	0	0.00%

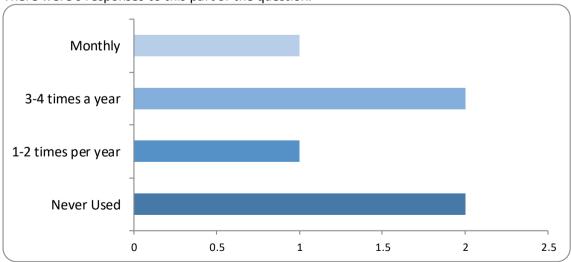
How often - School Meals Tables

There were 6 responses to this part of the question.



Option	Total	Percent
Weekly	0	0.00%
Monthly	0	0.00%
3-4 times a year	2	33.33%
1-2 times per year	4	66.67%
Never Used	0	0.00%
Not Answered	0	0.00%

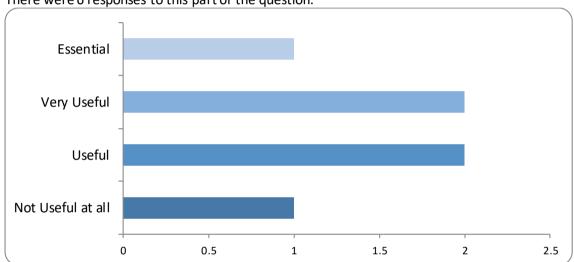
How often - School Meals InfographicThere were 6 responses to this part of the question.



Option	Total	Percent
Weekly	0	0.00%
Monthly	1	16.67%
3-4 times a year	2	33.33%
1-2 times per year	1	16.67%
Never Used	2	33.33%
Not Answered	0	0.00%

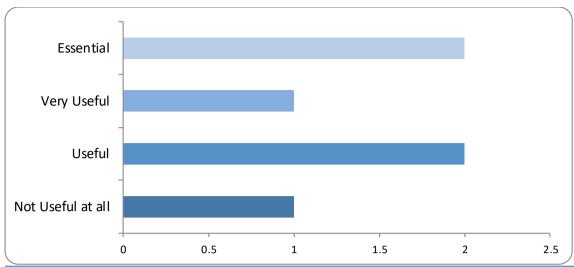
5. How useful are the following statistical products to you or your business area? Useful - School Meals Statistical Bulletin

There were 6 responses to this part of the question.



Option	Total	Percent
Essential	1	16.67%
Very Useful	2	33.33%
Useful	2	33.33%
Not Useful at all	1	16.67%
N/A	0	0.00%
Not Answered	0	0.00%

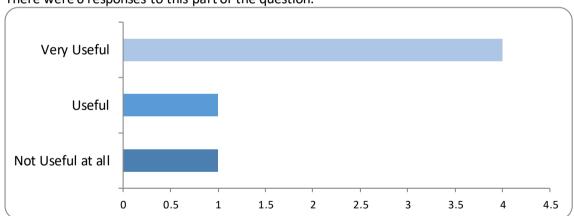
Useful - School Meals Tables



Option	Total	Percent
Essential	2	33.33%
Very Useful	1	16.67%
Useful	2	33.33%
Not Useful at all	1	16.67%
N/A	0	0.00%
Not Answered	0	0.00%

Useful - School Meals Infographic

There were 6 responses to this part of the question.



Option	Total	Percent
Essential	0	0.00%
Very Useful	4	66.67%
Useful	1	16.67%
Not Useful at all	1	16.67%
N/A	0	0.00%
Not Answered	0	0.00%

What other products would you like to be available?

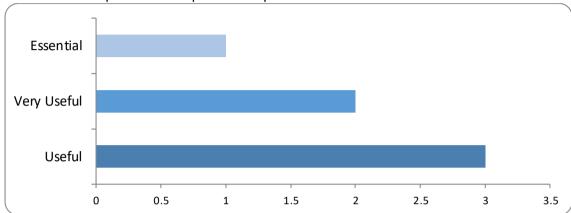
Any other comments?

There were 0 responses to this part of the question.

6. Specifically considering the School Meals statistical bulletin, how useful are the following sections to you or your business area?

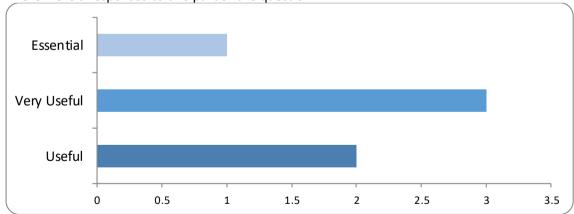
Useful - Commentary on uptake of school meals (free and paid) by pupils present for lunch

There were 6 responses to this part of the question.



Option	Total	Percent
Essential	1	16.67%
Very Useful	2	33.33%
Useful	3	50.00%
Not Useful at all	0	0.00%
N/A	0	0.00%
Not Answered	0	0.00%

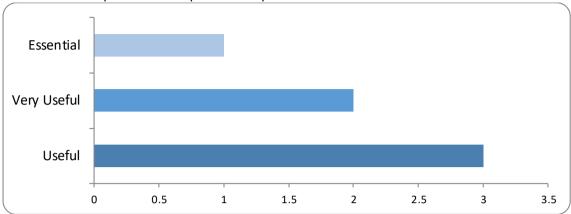
Useful - Commentary on entitlement to free school meals



Option	Total	Percent
Essential	1	16.67%
Very Useful	3	50.00%
Useful	2	33.33%
Not Useful at all	0	0.00%
N/A	0	0.00%
Not Answered	0	0.00%

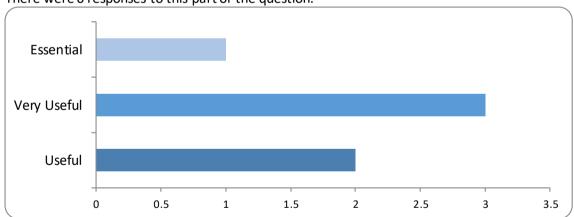
Useful - Commentary on uptake of free school meals by pupils entitled to free school meals

There were 6 responses to this part of the question.



Option	Total	Percent
Essential	1	16.67%
Very Useful	2	33.33%
Useful	3	50.00%
Not Useful at all	0	0.00%
N/A	0	0.00%
Not Answered	0	0.00%

Useful - Tables and charts



Option	Total	Percent
Essential	1	16.67%
Very Useful	3	50.00%
Useful	2	33.33%
Not Useful at all	0	0.00%
N/A	0	0.00%
Not Answered	0	0.00%

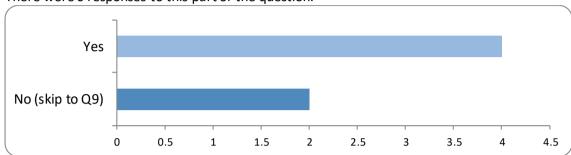
What other analysis or commentary would you like to see included?

There were 3 responses to this part of the question.

Any other comments?

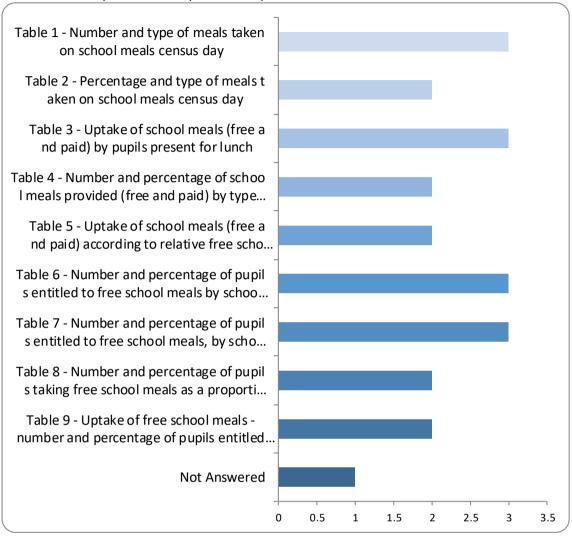
There were 0 responses to this part of the question.

7. Do you or your business area use any of the school meals statistical tables?



Option	Total	Percent
Yes	4	66.67%
No (skip to Q9)	2	33.33%
Not Answered	0	0.00%

8. Please select the statistical tables which you or your business area use.



Option	Total	Percent
Table 1 - Number and type of meals taken on school meals census day	3	50.00%
Table 2 - Percentage and type of meals taken on school meals census day	2	33.33%
Table 3 - Uptake of school meals (free and paid) by pupils present for lunch	3	50.00%
Table 4 - Number and percentage of school meals provided (free and paid) by type of meal provision	2	33.33%
Table 5 - Uptake of school meals (free and paid) according to relative free school meal entitlement	2	33.33%
Table 6 - Number and percentage of pupils entitled to free school meals by school type	3	50.00%
Table 7 - Number and percentage of pupils entitled to free school meals, by school type and school management type	3	50.00%
Table 8 - Number and percentage of pupils taking free school meals as a proportion of all school meals provided and as a proportion of pupils entitled	2	33.33%
Table 9 - Uptake of free school meals - number and percentage of pupils entitled to free school meals	2	33.33%
Table 10 - Adults taking school meals	0	0.00%
Not Answered	1	16.67%

What other analyses would you like to see in the tables?

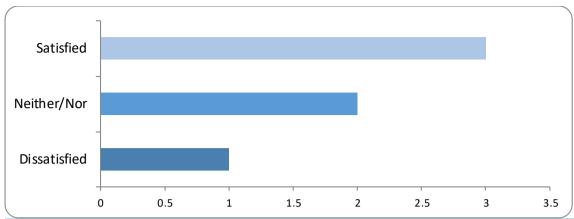
There was 1 response to this part of the question.

Any other comments?

There was 1 response to this part of the question.

9. Please read the following statements and indicate your level of satisfaction for each aspect of the information provided for schools meals uptake.

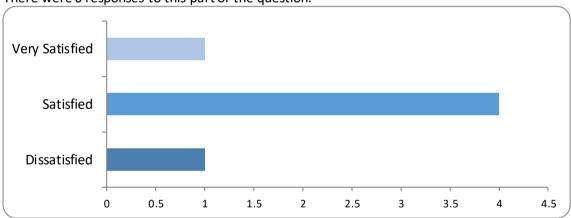
Satisfaction - a. The frequency of publication (annual) of school meals uptake information meets my needs



Option	Total	Percent
Very Satisfied	0	0.00%
Satisfied	3	50.00%
Neither/Nor	2	33.33%
Dissatisfied	1	16.67%
Very Dissatisfied	0	0.00%
Not Answered	0	0.00%

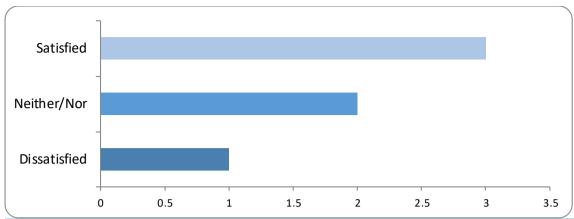
Satisfaction - b. School meals uptake information is clearly presented

There were 6 responses to this part of the question.



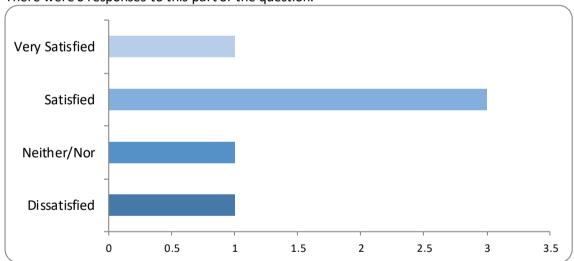
Option	Total	Percent
Very Satisfied	1	16.67%
Satisfied	4	66.67%
Neither/Nor	0	0.00%
Dissatisfied	1	16.67%
Very Dissatisfied	0	0.00%
Not Answered	0	0.00%

Satisfaction - c. The timing of publication (April) of school meals uptake information meets my needs



Option	Total	Percent
Very Satisfied	0	0.00%
Satisfied	3	50.00%
Neither/Nor	2	33.33%
Dissatisfied	1	16.67%
Very Dissatisfied	0	0.00%
Not Answered	0	0.00%

Satisfaction - d. School meals uptake information is easy to access



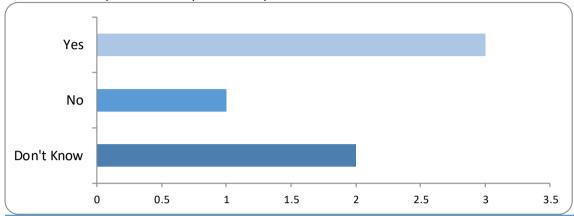
Option	Total	Percent
Very Satisfied	1	16.67%
Satisfied	3	50.00%
Neither/Nor	1	16.67%
Dissatisfied	1	16.67%
Very Dissatisfied	0	0.00%
Not Answered	0	0.00%

If you answered dissatisfied or very dissatisfied please provide further information (also specify the corresponding statement eg a., b.,)

There were 2 responses to this part of the question.

10. Do you or your business area think there is sufficient background information relating to the methodology and quality of the statistics?

There were 6 responses to this part of the question.

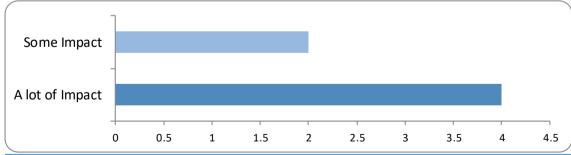


Option	Total	Percent
Yes	3	50.00%
No	1	16.67%
Don't Know	2	33.33%
Not Answered	0	0.00%

If you feel that there is not sufficient background information relating to the statistics, please suggest improvements that could be made:

There was 1 response to this part of the question.

11. What impact would publishing school meals uptake data every 2 years instead of annually have on you or your business area? Note information on numbers of pupils entitled to free school meals would still be available annually.



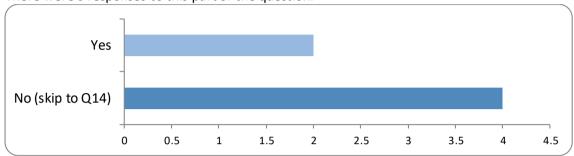
Option	Total	Percent
No Impact	0	0.00%
Some Impact	2	33.33%
A lot of Impact	4	66.67%
N/A	0	0.00%
Not Answered	0	0.00%

If you answered some or a lot of impact, please provide further details here:

There were 5 responses to this part of the question.

12. Have you or your business area ever requested additional information/analyses on school meals uptake that is not already published in the products?

There were 6 responses to this part of the question.



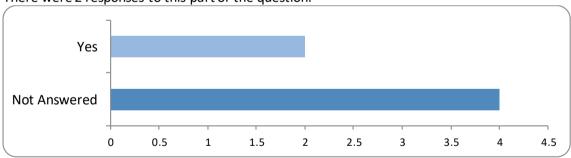
Option	Total	Percent
Yes	2	33.33%
No (skip to Q14)	4	66.67%
Not Answered	0	0.00%

If you answered yes, please provide more detail:

There were 2 responses to this part of the question.

13. Were you or your business area satisfied with the response or the information you received?

There were 2 responses to this part of the question.

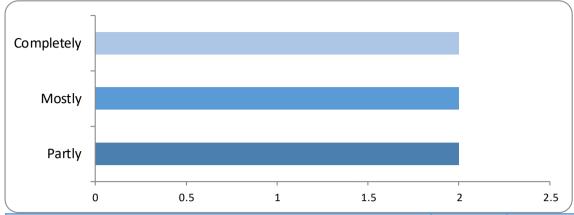


Option	Total	Percent
Yes	2	33.33%
No	0	0.00%
Not Answered	4	66.67%

If you answered no, please explain why:

14. Overall, to what extent do the Statistical Bulletin and related products meet your needs or that of your business area?

There were 6 responses to this part of the question.



Option	Total	Percent
Completely	2	33.33%
Mostly	2	33.33%
Partly	2	33.33%
Not at all	0	0.00%
Not Answered	0	0.00%

If the current information provided does not meet your needs, please describe what data/information you'd like to see included:

There were 2 responses to this part of the question.

15. Do you or your business area have any other comments or suggestions on how the School Meals in Northern Ireland Statistical Bulletin and related products could be improved?

Comments:

Annex B: School Meals Uptake Census Data Processing Flowchart

