



Scottish Economic Statistics Plan

2018/19

SCOTTISH ECONOMIC STATISTICS PLAN 2018/19

Executive Summary

Economic statistics are an essential source of information for policy makers, researchers and the wider public. The majority of the economic statistics for Scotland are produced and published by statisticians in the Office of the Chief Economic Adviser (OCEA) in the Scottish Government.

The economic statistics published for Scotland are more comprehensive, and more timely, than for any other part of the UK, and for many other devolved governments internationally. However, we are constantly seeking to improve the coverage of Scotland's economic statistics.

This plan sets out the work being undertaken to enhance the economic statistics published by the Scottish Government to ensure that they remain robust and continue to meet the needs of users.

Over the next year, addressing one of the main recommendations of the Economy, Jobs and Fair Work Committee, OCEA will prioritise development work to meet the needs of the Scottish Fiscal Commission (SFC). These improvements will include: producing real terms expenditure components of GDP ; improving estimates of government expenditure and household income components; and accessing and making better use of administrative data such as PAYE RTI.

Over the past year, OCEA has published over sixty statistical releases. This includes monthly labour market statistics, quarterly GDP and productivity data, annual statistics on business demography and experimental statistics have been published on Economic Accounts for the Whole of Scotland and Scottish Gross National Income (GNI). The publications can be accessed from the Scottish Government's website (<http://www.gov.scot/Topics/Statistics/Browse>) under the headings Economy; Business, Enterprise and Energy; and, Labour Market.

Summary of Scottish Economic Statistics Published by OCEA

National Accounts	Labour Market	Business and Trade	Energy and Climate Change
<ul style="list-style-type: none">• GDP• Retail Sales• Labour Productivity• Public Sector Finances• National Accounts• Input-Output Tables• Whole of Scotland Economic Accounts (experimental)• Gross National Income (GNI) (experimental)	<ul style="list-style-type: none">• Monthly Labour Market Briefs• Public Sector Employment• Regional Employment Patterns• Annual Survey of Hours and Earnings• EU Migrants Living and Working in Scotland• Youth Unemployment in Scotland• Scotland's Devolved Employment Services	<ul style="list-style-type: none">• Export Statistics Scotland• Scottish Annual Business Statistics• Businesses in Scotland• Research & Development• Growth Sectors• Innovation	<ul style="list-style-type: none">• Scotland's Carbon Footprint• Energy Statistics - Quarterly Summary• Oil and Gas Production Statistics• Energy in Scotland

Recent Developments in Scotland's Economic Statistics

The range of the economic statistics that we publish for Scotland continues to grow to meet user needs and to enhance understanding of Scotland's economy. The statistical methods that we use also continue to evolve, to reflect new data sources and improved statistical techniques.

Over the past year, a number of Special Projects, as set out in the Scottish Economic Statistics Plan 2017/18, have been undertaken as well as the routine development work. These aim to improve the scope, timeliness and communication of Scotland's economic statistics. The major improvements which have been made are summarised below. A more detailed list is provided in Annex D.

Scope

- New experimental statistics were developed and published following Special Projects in 2017/18. In February 2018 the first results of the Whole of Scotland Economic Accounts project were published, which includes a Supply and Use satellite account and trade estimates for Scotland's Extra-Regio economy from 1998 to 2016. In May 2018, annual estimates of Gross National Income (GNI) from 1998-2016 were published.
- The Scottish Consumer Sentiment Indicator has been published quarterly as an experimental official statistics publication since October 2017.
- Improved range of statistics published in Businesses in Scotland release with new series on ownership by country region and sector, and ownership by country region and local authority area.
- Improved analysis from the Green House Gas (GHG) emissions publication, including two additional shorter and simpler publications to address needs of a more diverse audience.
- Developed Scottish analysis of the Annual Population Survey to produce labour market indicators by industry, occupation and earnings for migrant workers in Scotland.

Timeliness

- Quarterly GDP statistics continued to be published earlier in the calendar timetable than in previous years, with most releases less than 100 days from the quarter end. Significant further improvements to timeliness are planned for 2018-19 following the Special Project work last year (see Annex C.1)

Communication

- Infographics (short visual summaries of key results) are now routinely published alongside all our official and experimental statistics releases
- The Office of the Chief Economic Adviser launched its own twitter account in January 2018 and has been tweeting regularly since then. Please follow us – details on page 11.
- Quarterly GDP statistics data (volume indices and growth rates) and annual exports data are now available on the Scottish Government open data platform at: www.statistics.gov.scot
- A new Group – the Sub-Scotland Economic Statistics Group was set up to discuss how analysts across Scotland can be better served with local economic data and analysis. This group met twice during 2017/18, and its work programme for 2018/19 is included in this plan – see Annex C.2.
- Undertook methodological improvements to the Scottish Energy Balance, as well as providing a simplified sankey diagram to improve the communication of the analysis.
- Developed the range of analysis available on the Scottish Government website from the Annual Survey of Hours and Earnings to include a longer time series of Gender Pay Gap statistics and to include gender pay gap based on full-time and all employees.
- Developed and published an export statistics FAQs to help explain the key issues and deal with common misconceptions on the subject.

Forthcoming Developments

Over the next twelve months, work will continue to enhance the economic statistics available for Scotland. The major planned developments are summarised below.

New Statistics – Over the course of 2018/19, OCEA will consult users on the data sources and methodologies underpinning the new GNI and Whole of Scotland Economic Accounts analyses. These will continue to be developed throughout 2018/19 with a view to releasing them as official (not experimental) statistics in accordance with the Code of Practice for Official Statistics.

Introduce a new Public Sector Finances publication to provide more detail on how the Scottish Government is funded and how it spends its resources in light of its new devolved powers.

Developing more business, trade and economic statistics at sub-Scotland levels. And when possible producing longer time series data.

Work in collaboration with Skills development Scotland to develop labour market projection capacity, to allow the examination of economic and policy scenarios.

Looking to bring together potential new data for the Scotland Heat Map to help evidence local development plans, alongside continual development and refinement of existing sources.

Develop estimates from newly created Annual Population Survey (APS) 3 year pooled dataset to produce analysis for Scotland (which have not previously been possible using a single year APS dataset due to small sample sizes).

Sector reviews – Over the course of 2018/19, OCEA will carry out thematic reviews of the data sources and methods used relating to the following sectors:

- Financial Intermediation (banks and building societies) – working with the Bank of England and the Office for National Statistics;
- Construction – working with ONS and other data providers to improve analysis of the regional allocation of UK output methodology, and to review the use of these statistics for Scotland's GDP;
- Trade – a full methodological review of how we produce our export statistics, assessing new data sources for both goods and services, and the future of the Global Connections Survey.
- Distributive Services – working with the Office for National Statistics to introduce VAT turnover data (an administrative data source) to augment the data collected by statistical Inquiries to improve the overall estimates in this area.

Communication and Publication – We will be publishing Scottish labour market, national accounts and business data on the Scottish Government's open data publishing platform (www.statistics.gov.scot) to improve access to the detailed data series underpinning our main publications.

Data Transformation and New Data Sources – We will be adopting new firm level quarterly VAT turnover data to enhance the coverage and robustness of Scottish GDP statistics. We are also in discussions with HMRC to secure access to new firm level trade data to enhance our estimates of Scotland's exports and working with colleagues in the Office for National Statistics (ONS) to improve our use of data on trade in services. We will continue to work closely with colleagues in ONS to ensure that enhancements to the UK statistical systems are extended to Scotland where possible.

SCOTTISH GOVERNMENT

SCOTTISH ECONOMIC STATISTICS PLAN 2018-19

Introduction

The Scottish Economic Statistics Plan for 2018-19 covers all the statistical products produced by the Office of the Chief Economic Adviser (OCEA) including:

- Scotland's National Accounts
- Public Sector Finances
- Business and Trade
- International Trade
- Energy and Climate Change
- Labour Market
- Employability and Skills.

A summary of our key publications is provided in the graphic below.



The plan provides details of all regular outputs and publications together with the proposed developments to them for the year ahead and beyond. Work to develop new statistical products will continue over the coming year. The Special Projects, as set out in last year's plan, will continue to be developed over 2018/19 along with some new developments as set out in this plan.

This plan will be refreshed periodically to reflect progress made in developing new products.

- A list and timetable of the Key Economic Statistics produced by the Scottish Government (with links to the relevant webpages) – Annex A.
- Detailed plans for developments in 2018-19 are provided in Annex B.
- Special Projects – longer term developments - are discussed in Annex C.
- Details of an earlier, revised GDP timetables are discussed in Annex C.1.

- Details of the Sub-Scotland Economic Statistics Group’s Work Plan for 2018/19 are discussed in Annex C.2.
- Main Achievements in 2017-18 are provided in Annex D.
- Resource details are provided in Annex E.
- Contact details are provided in Annex F.

Scottish Economic Statistics

The economic statistics currently produced for Scotland are more detailed, and timely, than those available in any other part of the UK and for many other devolved governments internationally. The diagram below provides a snapshot of the statistical information available for Scotland.

Economic statistics relating to Scotland are not only produced by the Scottish Government but by other government departments notably the Office for National Statistics (ONS), HM Treasury, HMRC, BEIS and others. There is a strong collaborative working relationship between us and the statistics producers in these, and other, departments.

The economic statistics produced for Scotland draw on a wide range of highly disaggregated company and household level datasets derived mainly from UK-wide data collected by the Office for National Statistics (ONS). In some cases, the Scottish Government boosts the size of the surveys undertaken by the ONS in Scotland to allow for more detailed statistics to be produced. In other cases, such as international exports, the Scottish Government undertakes its own surveys of Scottish companies. Finally, to produce some economic statistics, such as GDP, the Scottish Government receives information directly from major companies across Scotland.

Whilst there are a wide range of economic statistics available for Scotland, it should be noted that there are a number of challenges in producing statistics for Scotland that are not faced when producing comparable statistics for the UK as a whole. For example, while there is a legal requirement for companies to provide detailed accounts for their operations in the UK as a whole, there is no legal requirement to disaggregate these figures by country or region within the UK. Additionally, relating to Scotland’s public sector finances, tax revenue figures for individual countries and regions of the UK are not available for some revenues. As a result, some Scottish tax revenues have to be estimated using a variety of apportionment methodologies.

What are Official Statistics?

All statistics published by OCEA are classified as Official Statistics. This means that they are produced impartially and free from political interference, and comply with the Code of Practice for Official Statistics.¹

The Code of Practice sets out a number of principles which official statistics must reflect. These include:

- Meeting users’ needs
- Being managed impartially and objectively
- Ensuring that the public interest prevails in their production
- Using statistical methods consistent with internationally recognised best practices
- Maintaining confidentiality of private information
- Minimising the cost burden on data suppliers

¹ <https://www.statisticsauthority.gov.uk/osr/code-of-practice/>

- Ensuring resources devoted to statistical activities are sufficient to meet the requirements of this Code
- Accompanying statistical releases with full and frank commentary which is accessible to users.

The UK Statistics Authority's (UKSA) Office for Statistics Regulation is the independent body tasked with safeguarding the production and publication of official statistics across the UK. Official statistics which are assessed by the UKSA OSR to comply with the Code of Practice are designated as National Statistics. Accredited 'National Statistics' are identified by the following quality mark on the right. Most OCEA statistics are National Statistics. Some of our products are currently being developed and are classified as "experimental" while undergoing peer review and quality assurance procedures.



Meeting Users' Needs

OCEA's statistical work programme has two key objectives.

- To improve the quality, timeliness and breadth of Scotland's economic statistics,
- To provide a quality service to users, whether they be Scottish Ministers, The Scottish Fiscal Commission, Parliament, academics, the general public and business communities.

Statisticians in OCEA engage regularly with users to inform the development of its economic statistics. This engagement includes regular user surveys and public events, and meetings of the Scottish Economic Statistics Consultants Group (SESCG)², which comprises of experts from academia, public sector and business communities. In addition we have a number of SESC subgroups including the Input-Output Expert Users Group and the recently established Sub-Scotland Economic Statistics Group. We hold regular meetings with key users, such as the Scottish Fiscal Commission, to discuss work in progress and future developments.

All statistics releases have named statistician contacts who are happy to discuss technical matters with users over the phone or by email. We also operate a number of themed email accounts which are frequently used for information requests.

User Consultations

We undertake regular consultations with the users of our statistics. This is to ensure that the existing statistics we publish are meeting their needs and that we have a good understanding of users requirements when developing new statistical products. In addition, all major changes to Scotland's economic statistics are subject to user consultation to ensure that they command the support of users.

Over the past year we have undertaken consultations on a number of our statistical outputs, including GERS, and the GDP User Survey, and sought user views on new statistics, such as the Whole of Scotland Economic Accounts. On the back of these consultations we have made a number of improvements to

² Engagement on climate change statistics is conducted via the Natural Environment Statistics Advisory Committee (NESAC). <http://www.gov.scot/Topics/Statistics/Browse/Environment/scotstat/committees>

our statistics, such as bringing forward and improving the presentation of the GERS publication, and adding additional historical analysis to the GDP publication.

The Scottish Economic Statistics Consultation Group

The Scottish Economic Statistics Consultation Group (SESCG) meets regularly to consider, discuss and peer review methodological and other changes to Scotland's economic statistics. A number of sub-groups also exist to provide detailed scrutiny and analysis of particularly economic products. These include the Scottish Input-Output Expert Users Group, the Labour Market Forum and the Sub-Scotland Economic Statistics Group.

SESCG last met on 16 March 2018. At this meeting the group supported the following areas of work as priorities for development:

- Quality improvement and timeliness of Scottish GDP estimates
- Continued developments of Gross National Income (GNI) and Whole of Scotland Economic Accounts, with a longer term ambition of using these to analyse Balance of Payments
- Better quality trade statistics (both exports and imports) between Scotland and the rest of the world and with the rest of the UK, and enhanced analysis of flows of goods and services between Scotland and the UK Continental Shelf;
- Improved public sector finance statistics for Scotland;
- Increased understanding and analysis of capital expenditure and investment in Scotland.
- More analysis of economic activity (in particular constant price GDP indices) for sub-Scotland regions.

Further information on SESCOG including minutes and presentations of previous meetings, and information on how to join the group is available from

<http://www.scotland.gov.uk/Topics/Statistics/scotstat/economy/meetings>

Economy, Jobs and Fair Work Committee

The Scottish Parliament's Economy, Jobs and Fair Work Committee during 2017/18 carried out an inquiry into the quality and coverage of economic statistics for Scotland. Its remit was to examine the accuracy, utility and comprehensibility of Scottish economic statistics; to consider what data is required for effective delivery and scrutiny of policy; and to recommend where any improvements might be made.

The Inquiry began on 12 June 2017, and the final report, [How To Make Data Count: Improving The Quality And Coverage Of Our Economic Statistics](#), was published on 12 February 2018. There were 33 written submissions, and the Committee heard from various expert witnesses in six Committee meetings.

This plan reflects most of the detailed recommendations in the report as well as the needs of other users. In particular, we shall:

- Work closely, as now, with colleagues in the Scottish Fiscal Commission, prioritising its data needs, particularly in reference to improving statistics on earnings, trade, Scottish prices and real GDP(E) components, and sub-Scotland economic statistics. Much of this depends on the cooperation of other government departments, such as HMRC and ONS.
- Continue to improve the timeliness of key indicators e.g. accelerate publication of GDP;

- Explore how to address the matter of UK-wide companies not having to report specifically on their activities in Scotland;
- Exploit the Digital Economy Act to access a greater range of administrative data and explore all possibilities for improving coverage and quality through data sharing agreements, especially with ONS and HMRC;
- Reflect on the lack of a single website or portal to bring the most up-to-date economic data for Scotland together in one place;
- Renew impetus in measurement of social inclusion – including consideration of new or alternative statistics; develop these within a statistical framework set out in a regular quarterly or biannual publication;
- Consider how we can champion a better awareness and understanding of economic statistics for policy makers, journalists and the public.

Scottish Fiscal Commissions

The Scottish Fiscal Commission has been responsible for producing the independent and official economic and fiscal forecasts for Scotland since April 2017. The Commission's forecasts feed directly into the Budget decisions that Parliament takes and also into the Government's cash management. In turn, the economic statistics produced by the Scottish Government and others are critical to the Commission creating these forecasts. As noted above, the Scottish Parliament has recommended that the statistical needs of the SFC – given its responsibility for economic and fiscal forecasting – should be a top priority.

Over the next year, OCEA will prioritise the needs of the SFC as follows:

- Expanding the coverage of the Quarterly National Accounts for Scotland (QNAS) by publishing GDP by components of expenditure in constant prices – by producing estimates of deflated GDP(E) on an experimental basis during 2018/19.
- Publishing, as part of QNAS, a more comprehensive breakdown of public sector expenditure in Scotland by different levels of government – by investigating the use of administrative data from the OSCAR spending database.
- Developing better and more timely data on Scottish wages – by exploring how new administrative data on Real Time Information (RTI) for PAYE can be used.
- Publishing more detailed breakdowns of household income – by exploring how RTI and other data sources may be used to improve Scottish estimates of Gross Disposable Household Income (GDHI) in the Quarterly National Accounts.

OCEA will report on progress at the next SESC meeting and via updates on the OCEA webpages. OCEA will keep SFC apprised of progress throughout the year.

Wider Context

The economic statistics featured in this plan are also used to inform progress against a number of national and other strategies established to benefit the people of Scotland. These include:

The National Performance Framework -

http://www.gov.scot/About/Performance/scotPerforms?utm_source=website&utm_medium=navigation&utm_campaign=statistics-evaluation-tools

Labour Market Strategy - <https://beta.gov.scot/news/labour-market-strategy/>

Inclusive Growth Framework - <https://beta.gov.scot/policies/economic-growth/inclusive-growth/>

Child Poverty Strategy - <https://beta.gov.scot/policies/poverty-and-social-justice/child-poverty/>

Gender Pay Gap - <https://beta.gov.scot/policies/gender-equality/>

Refreshed Digital Strategy - <https://beta.gov.scot/publications/realising-scotlands-full-potential-digital-world-digital-strategy-scotland/>

Disseminating our products

All of our statistical releases are made available on the Scottish Government website and are accompanied by a statistical news release. On release of all our statistical publications we alert users who have registered an interest on ScotStat via an email with a link to the publication. We also use twitter to alert a wider range of users and encourage re-tweeting as appropriate. Infographics (visual data summaries) accompany our major publications to encourage greater use and re-use of our products.

Getting in Contact

If you would like to find out more information about the economic statistics produced for Scotland, or if you wish to get in contact with the statistics team in OCEA, there are a number of ways in which you can do so.



Annex A provides a summary of our key economic publications and links to further information including data, methodology details, commentary and meta data about our range of outputs.



You can find the telephone numbers and email address for our statistical staff in Annex F. If you are not sure who to contact then you can use the email address economic.statistics@gov.scot and we will pass your inquiry to the relevant person.



You can register your statistical interests on ScotStat (<http://www.gov.scot/Topics/Statistics/scotstat>) to receive notification of all our outputs on the day of publication, and wider statistical developments.



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ANNEX A

OFFICE OF THE CHIEF ECONOMIC ADVISER, SCOTTISH GOVERNMENT

Publication Plan for 2018-19

This Annex provides details on OCEA's main statistical outputs and lists the planned statistical publications proposed for 2018-19. A list of, and links to, Scotland's economic statistics is available online at <http://www.gov.scot/Topics/Statistics/Browse> by searching under the Economy; Business, Enterprise and Energy; and Labour Market themes.

Details of future publications and their publication dates (when available) can be accessed from <http://www.gov.scot/Topics/Statistics/ForthcomingPubs> and by searching the relevant theme of interest.

Key Economic Statistics include:

Gross Domestic Product shows how the economy has grown on a quarterly basis and is directly comparable to the statistics for UK GDP growth published by the ONS. The statistics are published quarterly and are available from <http://www.gov.scot/gdp>.

The **Retail Sales Index for Scotland** is a quarterly measure of the performance of the retail sector of the Scottish economy. It relies on the same core data – the ONS Monthly Business Survey (Retail Sales Inquiry) – used for the Scottish GDP estimates. The statistics are published quarterly and are available from <http://www.gov.scot/Topics/Statistics/Browse/Economy/PubRSI>.

The **Input-Output and Supply Use tables** provide detailed information on the flow of goods and services in the economy. It forms the basis of many of the economic models and impact assessments undertaken by the Scottish Government and underpins many of our other economic statistics. The tables are published annually and are available from <http://www.gov.scot/Input-Output>.

The **Quarterly National Accounts Scotland (QNAS)** contains a range of detailed indicators of Scotland's economic performance including:

- Cash values of GDP
- GDP components of Income and Expenditure Approaches
- Public Sector Revenue
- Index of Manufactured Exports
- Household Savings Ratio

QNAS is published quarterly and available from <http://www.gov.scot/Topics/Statistics/Browse/Economy/QNAS>

The **Labour Productivity statistics** publication provides quarterly estimates of labour productivity for Scotland's onshore economy and can be found at <http://www.gov.scot/Topics/Statistics/Browse/Economy/Productivity>

The statistics on **Scotland's Devolved Employment Services** publish statistics on the performance of the services. The 2017/18 publication captures the first year of service operation and is available at <https://www.gov.scot/Publications/2018/05/5552>

The **Oil and Gas Production Statistics** includes estimates of oil and gas production activity in Scotland (including Scottish adjacent waters). It reports production volumes, approximate sales income, operating costs and capital expenditure. It is published annual and is available here: <http://www.gov.scot/Topics/Statistics/Browse/Economy/oilgas>

The **Scottish National Accounts Programme (SNAP)** – Experimental Statistics (statistics in development) – watch out for further developments relating to:

- Whole of Scotland Economic Accounts
- Scotland's Gross National Income (GNI)
- Scotland's Balance of Payments
- Sub-Scotland economies

These will be available from <http://www.gov.scot/snap>.

Government Expenditure and Revenue Scotland (GERS) estimates the contribution of revenue raised in Scotland towards the goods and services provided for the benefit of the people of Scotland under the current constitutional arrangement. The report is published annually and is available from <http://www.gov.scot/gers>.

Scotland's Funding – a new publication setting out how Scotland is funded and how money raised is spent.

Scottish Consumer Sentiment Indicator is a composite measure of consumer sentiment in Scotland based on a quarterly survey of households' current sentiment and future expectations of: Scottish economic performance, household finances, and attitudes to spending money. These indicators are currently classified as experimental. They are published quarterly, and are available here: <http://www.gov.scot/Topics/Statistics/Browse/Economy/SCSI>

Export Statistics Scotland provides estimates of Scottish international exports since 2002. It also estimates Scotland's exports to the rest of the UK. It includes both the services and manufacturing sectors of the Scottish economy, although excludes oil and gas. The figures are published annually and are available from <http://www.gov.scot/Topics/Statistics/Browse/Economy/Exports/ESSPublication>

Businesses in Scotland provides estimates of the number of enterprises operating in Scotland – with disaggregated data provided including by industry sector, business size, local authority area, urban/rural area and ownership. The report is published annually and is available from <http://www.gov.scot/Topics/Statistics/Browse/Business/Corporate>

Scottish Annual Business Statistics provides detailed data on businesses' employment, turnover, purchases, approximate gross value added and labour costs. Data are classified according to industry group, geographical area and ownership. The report is published annually and is available from <http://www.gov.scot/Topics/Statistics/Browse/Business/SABS>

Business Enterprise Research and Development Scotland provides statistics on expenditure and employment on research and development performed by businesses in Scotland. The published data tables include information broken down by product group, company size, ownership and local authority area. The report is published annually and is available from <http://www.gov.scot/Topics/Statistics/Browse/Business/RD>

Gross Expenditure on Research and Development Scotland provides statistics on expenditure on research and development performed by businesses, academia, government and charities in Scotland. The published data tables include expenditure expressed as a share of GDP, with UK and international comparisons. The report is published annually and is available from <http://www.gov.scot/Topics/Statistics/Browse/Business/RD>

UK Innovation Survey – Results for Scotland provides statistics on business innovation activity in Scotland. The report is published biennially and is available from <http://www.gov.scot/Topics/Statistics/Browse/Business/Publications/UKIS>

Labour Market Statistics provide estimates of headline measures of employment, unemployment and inactivity for Scotland and smaller areas within Scotland. Information is also available on the characteristics of the workforce including: age, gender and by equality characteristics. Estimates are also provided for characteristics of employment including work pattern (i.e. full-time/part-time employment), industry and occupation. The Scottish Government also carry out a Quarterly Public Sector Employment collection. The statistics can be accessed here: <http://www.gov.scot/Topics/Statistics/Browse/Labour-Market>

Annual Earnings Statistics provides estimates for Scotland of Earnings of employees in Scotland, the gender pay gap for full-time and all employees by various characteristics including: age, sector, occupation etc, Employees earnings the National Minimum Wage and Employees earning the living wage. The statistics can be accessed here: <http://www.gov.scot/Topics/Statistics/Browse/Labour-Market/Earnings>

Energy Statistics provide an annual publication which presents a wide range of energy data and analysis for Scotland including: energy consumption, electricity, heat, transport, oil and gas, energy prices, climate change, and the low carbon economy. It also contains a series of information boxes and articles aimed at addressing topical issues or common areas of misunderstanding. Analysis provided also includes an energy balance for Scotland, with flow chart diagram (primary energy production through to end use in Scotland) and monitoring of the SG renewable energy targets. The publication can be accessed here: <http://www.gov.scot/Topics/Statistics/Browse/Business/Energy/EIS>

The Scottish Government also provides a quarterly summary note containing the key facts and trends for Scotland including renewable electricity generation estimates and sub-national energy consumption estimates. These summaries can be accessed here: <http://www.gov.scot/Topics/Statistics/Browse/Business/Energy/Publications/Summaries>

Climate Change Statistics provide annual publications covering estimates of greenhouse gas emissions in Scotland and Scotland's carbon footprint, both of which are used to monitor key National Performance Framework indicators. The greenhouse gas emissions publication provides estimates of emissions in Scotland as well as information on the performance against emissions reduction targets, taking account of trading in carbon units. This publication can be accessed here: <http://www.gov.scot/Publications/2018/06/6601>

Scotland's Carbon Footprint refers to estimates of Scotland's greenhouse gas emissions on a consumption basis. This refers to emissions which are associated with the spending of Scottish residents on goods and services together with emissions directly generated by Scottish households. This publication can be accessed here: <http://www.gov.scot/Topics/Statistics/Browse/Environment/Publications/carbonfootprint9814>

Timetable for main economic statistics outputs for 2018-19

The main outputs to be produced in 2018-19 are summarised in the table below.

Month	Theme	Status	Freq	Output
April 2018	NA	NS	Q	Gross Domestic Product - 2017, Q4.
	NA	Exp	Q	Scottish Consumer Sentiment Indicator – 2018, Q1
	LM	NS	M	Labour Market Monthly Web Updates.
	ECC	OS	A	Scotland Performs Update, National Indicator 47, Reduce Scotland’s Carbon Footprint
May 2018	NA	NS	Q	Retail Sales Index for Scotland - 2018, Q1
	NA	NS	Q	Quarterly National Accounts– 2017, Q4
	NA	OS	Q	Labour Productivity – 2017 Q4
	LM	NS	M	Labour Market Monthly Web Updates.
	LM	NS	A	Regional Employment Patterns in Scotland: Statistics from the Annual Population Survey 2017
	ES	OS	Q	Scotland’s Devolved Employment Services, 2017/18
June 2018	NA	NS	Q	Gross Domestic Product - 2018, Q1.
	BT	NS	A	Scottish Annual Business Statistics 2016
	LM	NS	Q	Public Sector Employment Statistics in Scotland – 2018, Q1.
	LM	NS	M	Labour Market Monthly Web Updates.
	LM	NS	Q	Annual Population Survey, results for year to 31 March 2018
	ECC	OS	A	Scottish Greenhouse Gas Emissions, 2016
	ECC	OS	A	Scotland Performs Update, Purpose Target 7, Sustainability
	ECC	OS	Q	Energy Statistics – Quarterly Summary Q1 2018
	ECC	OS	2A	Scotland Performs Update on Renewable Electricity 2017
	LM	OS	A	Publish paper on “Education Working for all-Developing Scotland Young Workforce Programme”
July 2018	NA	OS	A	Supply, Use and Input-Output Tables 1998-2015
	NA	Exp	Q	Scottish Consumer Sentiment Indicator – 2018, Q2
	LM	NS	M	Labour Market Monthly Web Updates.
Aug 2018	NA	NS	Q	Retail Sales Index for Scotland 2018, Q2
	NA	NS	Q	Quarterly National Accounts – 2018, Q1
	NA	NS	A	Government Expenditure and Revenue Scotland – 2017-18
	LM	NS	M	Labour Market Monthly Web Updates.
	NA	OS	Q	Labour Productivity – 2018 Q1
	ES	OS	Q	Scotland’s Devolved Employment Services – 2018 Q1
Sep 2018	NA	NS	Q	Gross Domestic Product - 2018, Q2.
	LM	NS	Q	Public Sector Employment Statistics in Scotland – 2018, Q2
	LM	NS	M	Labour Market Monthly Web Updates.
	LM	NS	Q	Annual Population Survey, results for year to 30 June 2018
	NA	OS	A	Oil and Gas Production Statistics, 2017-18
	ECC	OS	Q	Energy Statistics – Quarterly Summary Q2 2018
Oct 2018	NA	Exp	Q	Scottish Consumer Sentiment Indicator – 2018, Q3
	BT	OS	2E	UK Innovation Survey 2017 – Results for Scotland
	LM	NS	M	Labour Market Monthly Web Updates
	LM	NS	A	Annual Survey of Hours and Earnings 2018 – SG Analysis
Nov 2018	NA	NS	Q	Retail Sales Index for Scotland 2018, Q3
	NA	NS	Q	Quarterly National Accounts – 2018, Q2
	BT	NS	A	Businesses in Scotland 2018
	LM	NS	M	Labour Market Monthly Web Updates.
	NA	OS	Q	Labour Productivity – 2018 Q2
	ES	OS	Q	Scotland’s Devolved Employment Services – 2018 Q2
Dec 2018	NA	NS	Q	Gross Domestic Product - 2018, Q3.
	NA	NS	A	Scotland’s Global Connections Survey, 2017.

	LM ECC ECC LM LM ECC BT	NS OS OS NS NS OS NS	Q A 2A M Q Q A	Public Sector Employment Statistics in Scotland – 2018, Q3. Scotland’s Carbon Footprint, 1998-2015, Scotland Performs Update on Renewable Electricity 2017 Labour Market Monthly Web Updates. Annual Population Survey, results for year to 30 September 2018 Energy Statistics – Quarterly Summary Q3 2018 Business Enterprise Research & Development Scotland 2017
Jan 2019	NA LM BT	Exp NS NS	Q Q A	Scottish Consumer Sentiment Indicator – 2018, Q4 Labour Market Monthly Web Updates. Export Statistics Scotland 2017
Feb 2019	NA NA LM NA ECC ES	NS NS NS OS OS OS	Q Q M Q A Q	Retail Sales Index for Scotland - 2018, Q4 Quarterly National Accounts – 2018, Q3 Labour Market Monthly Web Updates. Labour Productivity – 2018 Q3 Energy in Scotland 2019 Scotland’s Devolved Employment Services – 2018 Q3
Mar 2019	NA LM LM LM ECC BT	NS NS NS NS OS NS	Q Q M Q Q A	Gross Domestic Product - 2018, Q4. Public Sector Employment Statistics – 2018, Q4. Labour Market Monthly Web Updates. Annual Population Survey, results for year to 31 December 2018 Energy Statistics – Quarterly Summary Q4 2018 Gross Expenditure on Research & Development Scotland 2017

Key:

Theme:

NA = National Accounts
LM = Labour Market
BT = Business and Trade
ECC = Energy and Climate Change

Status:

NS = National Statistics
OS = Official Statistics
Exp = Experimental Statistics

Frequency:

A = Annual
2A = Bi-annual (2 per year)
2E = Biennial (every 2 years)
Q = Quarterly
M = Monthly

Alongside the National and Official Statistics publications above, the BT and ECC units maintain the Growth Sector Statistics and Energy Statistics databases, which are periodically updated shortly after the underlying statistics are published.

Planned Developments to Existing Publications in 2018-19

This provides a high level summary of the main developments planned for the coming year. Further details can be provided from the contacts mentioned in Annex F.

Short Term Indicators Team

- Following the Special Project work in 2017-18, to introduce an earlier ‘first estimate’ of GDP growth, and a regularly updated ‘second estimate’ in each Quarterly National Accounts Scotland.
- To continue developing more user-friendly and visual explanations of GDP statistics.
- To conduct industry data and methods reviews
- To work with ONS on data transformation projects such as the introduction of VAT turnover data.

Input-Output Modelling Team

- Construct a new Environmental Input-Output Model using latest published Scottish and UK Input-Output Tables for use in the Carbon Assessment of the Draft Budget 2019/20.
- Continue to work with OCEA Policy Modelling branch to develop in house single Scottish region and two region Scotland and Rest of UK Social Accounting Matrices for the Scottish Government Computable General Equilibrium model to allow for better Brexit analysis.
- In line with European System of Accounts requirements, begin work to overhaul the entire SUT system to produce constant price tables.
- Work with ONS on the bid to host the 2019 International Input-Output Association conference in Glasgow.

Scottish National Accounts Coordination/ Public Sector Finances

- OCEA is proposing to introduce a new statistical publication on the finances of the Scottish Government, local government in Scotland, and their associated agencies and bodies. A consultation on this is underway - <https://www.gov.scot/Topics/Statistics/Browse/Economy/GERS>
- From August, to include an updated ‘second estimate’ of GDP growth in each QNAS publication, requiring reformatting of the publication and web pages, and development of open data releases for other components of the quarterly national accounts.
- Over recent years, there has been considerable focus on improving the detail and accuracy of GDP by expenditure in nominal terms (current prices). This has been an essential precursor to enable deflation of the results. Building on this work and other developments to methods and data, we plan to begin producing estimates of deflated GDP(E) on an experimental statistics basis during 2018-19.
- In the Household sector income accounts, estimates of Compensation of Employees and other components of income will be reviewed, with the aim of producing more detailed breakdowns of earnings. As part of this work, the Scottish Government is exploring how new administrative data on Real Time Information (RTI) for PAYE can be used, coupled with a more detailed breakdown of COE in the latest Regional Gross Disposable Household Income release.
- We plan to continue investigating the use of administrative data from the Online System for Central Accounting and Reporting (OSCAR) spending database to improve estimates of GGFCE and government investment in the Quarterly National Accounts, and provide more detail for breakdowns between the different sectors of Government and categories of spending. This

information is also required to develop the deflated of GDP(E) measures mentioned previously.

- Continue to develop new analysis on labour productivity decomposition to better understand what is driving productivity changes.

Business and Innovation Statistics

- Developing experimental statistics on innovation activity and business growth at sub-Scotland levels to support the new National Performance Framework.
- Continue to expand the range of business and innovation statistics published on the open data publishing platform (statistics.gov.scot).
- Developing estimates of unregistered businesses at sub-Scotland levels.
- Earlier publication of Scottish Annual Business Statistics.
- Continue to develop the growth sector statistics database to include a range of new indicators linked to inclusive growth.

Trade Statistics

- Pilot online data collection for the Global Collections Survey to improve response rates and reduce respondent burden on Businesses.
- Continue to improve the sampling, data sources and methodology to improve the estimates of Scottish exports. This includes making more use of ONS ITIS data and engaging with HMRC to gain access to its trade statistics data.
- Develop experimental export statistics that include the oil and gas sectors.
- Increase the use of data visualisation to help engage users of export statistics.
- Continue to advance the experimental export statistics that have been produced at a sub-Scotland level.
- Continue to publish export data on the Scottish Open Data Platform (www.statistics.gov.scot).

Energy & Climate Change Statistics

- Continuing to develop the methodology behind the energy balance, including making the data more accessible to users via the R Shiny app (see next bullet point)
- Quarterly energy publications will be supported by a web-based interactive app designed in R Shiny allowing users to customise their own analyses. It will be supplemented by a revamped and detailed database of energy statistics that feature in the annual Energy in Scotland publication, which will be updated as new data become available.
- Looking to bring together potential new data for the Scotland Heat Map to help evidence local development plans, alongside continual development and refinement of existing sources.
- Climate change statisticians will continue to engage the National Inventory Steering Committee (NISC) and the Scientific Steering Group in order to implement methodological improvements to the greenhouse gas inventories for Scotland and the other UK nations. A significant change to the scope of the inventory will be implemented over the coming years which will incorporate the IPCC Wetlands Supplement into the statistics.
- Consultation with users on the format and content of greenhouse gas and carbon footprint statistics in order to ensure the publications' relevance in the context of revised climate change regulations for Scotland.
- Collaboration with ONS on the Low Carbon and Renewable Energy Survey, for which Scotland has funded a sample-boost.
- Collaboration with Leeds University on methodological improvements to the Carbon Footprint.

- Collaboration with academia to further improve the representation of technologies in SG energy models and to expand the functionality of the models.

Employability Statistics

- The publication scheme to date has reflected the performance of the transitional employment services recording data on referrals and starts to the services. Publications from 2018 Quarter 1 onwards will expand the range of available statistics to provide breakdowns of key participant characteristics and outcomes.

Labour Market

- Develop our labour market expertise examining issues affecting Scotland's labour market on earnings, job quality, technological change and analysis of protected characteristics to support labour market policy on age, gender, ethnicity and disability. Alongside this, we will improve our modelling capacity to account for impact of policy changes and shocks in the labour market.
- Publish labour market statistics on the open data publishing platform (www.statistics.gov.scot). Develop estimates from newly created Annual Population Survey (APS) 3 year pooled dataset to produce analysis for Scotland (which have not previously been possible using a single year APS dataset due to small sample sizes). For example by equality characteristics and nationality.
- Update and develop the ad-hoc Scottish Government Publication 'EU National Living and Working in Scotland' for 2016 (published March 2017) <http://www.gov.scot/Topics/Statistics/Browse/Labour-Market/Publications> .
- Engage with ONS and provide feedback to ONS on their Labour Market Statistics Transformation Programme and proposed 2017 Labour Market Framework. Moving towards a more integrated use of administrative data sources, these ONS Initiatives propose to develop and review Labour Market Statistics requirements.
- Explore the feasibility of producing earnings estimates by equalities characteristics for Scotland.
- Work with Skills Development Scotland supporting them to deliver Partnership Action for Continuing Employment by provision of labour market information.
- Continue to produce and develop high quality statistical publications and improve the quality of indicators that better measure aspects of the economy. This includes better measures of the quality of work.

SPECIAL PROJECTS

In addition to the routine outputs and their developments (as detailed above) OCEA is developing a range of new products. These will initially be presented as “experimental statistics” and will be published alongside other related official statistics. The “experimental” nature of these new statistics is to allow time to quality assure the figures and to discuss their usability. In due course, it is assumed that the developed products will either form part of existing publications (such as the Quarterly National Accounts for Scotland) or be standalone releases in their own right.

The proposal to begin work on the Special Projects was discussed and agreed initially at the SESCOG Meeting on 25 April 2017. Updates and details of experimental statistics released were presented to the SESCOG Meeting on 16 March 2018. The slides from the various presentations are available here - <http://www.gov.scot/Topics/Statistics/Browse/Economy/ScotStat/Meetings>.

The ongoing Special Projects are:

- Whole of Scotland Economic Accounts
- Gross National Income (GNI)
- Annual Income Accounts and Balance of Payments
- Earlier Publication of GDP
- Sub-Scotland economic statistics
- Natural Capital Accounts

Whole of Scotland Economic Accounts

Most of the economic statistics produced for Scotland (GDP, Supply-Use tables etc) relate to Scotland’s onshore economy. The offshore economy in this treatment (including North Sea output and defence and diplomatic services overseas) are classified as “Extra Regio” – an extra region of the UK. For a number of years, estimates of value added in a hypothetical Scottish share of Extra Regio have been published in the QNAS publication, and these figures have also be used in the annual GERS publication.

This special project has initially established a set of Supply and Use tables for the Scottish element of Extra Regio (as a satellite account to the main tables) detailing flows of the value of goods and services to and from this area to onshore Scotland, Rest of the UK and Rest of the World. The satellite account can then be combined with the onshore Scottish Input-Output tables to form a “Whole of Scotland “ set of accounts.

A first experimental release “Development of Supply and Use Satellite Accounts for Extra-Regio Economic Activities” was published on 22 February 2018. We plan to consult with users of the analysis and potential data suppliers during 2018. These statistics are currently planned for annual updates. <http://www.gov.scot/Topics/Statistics/Browse/Economy/SNAP/satelliteaccounts>

Gross National Income (GNI)

Many users of Scottish economic statistics have suggested that estimates of Scottish GDP should be complemented by estimates of GNI. GDP only covers the production boundary e.g. the value added of goods and services made in Scotland. It takes no account of the ownership of non-Scottish companies operating in Scotland (where a proportion of the gross operating surplus will be assigned as a flow to the company headquarters outside Scotland), or conversely, Scottish companies with

economic activity outside Scotland (where profits made outside Scotland will flow back to the HQ in Scotland).

Annual figures for Scottish GNI were estimated in 2013 relating to the calendar year 2010 (further details about the estimates and underpinning methods may be found here - <http://www.gov.scot/Topics/Statistics/Browse/Economy/SNAP/expstats>). This work was published as experimental estimates. It has not been updated since then.

The GNI Special Project is an attempt to re-establish this work as an experimental series that can be updated over time.

Much of the UK data, to which Scottish apportionments can be applied (rather like for the compilation of the GERS publication), are available quarterly - so the proposal is to construct the Scottish series quarterly and to seasonally adjust (as done by ONS for the UK estimates) to provide a comparable series over time. The proposal is to update the model on a quarterly basis and to review this frequency of publication, taking revisions and other adjustments into account.

An experimental release “Development of a Primary Income Account and Gross National Income (GNI) for Scotland” was published on 2 May 2018. We plan to consult all potential users of the analysis through a statistical consultation later in 2018.

<http://www.gov.scot/Topics/Statistics/Browse/Economy/SNAP/GNI>

Annual Income Accounts and Balance of Payments

Now that progress has been made on the previous two Special Projects, we now have experimental estimates of Scotland’s Balance of Trade (the value of Exports minus Imports from the Whole of Scotland Accounts {combining Scottish onshore and Scottish offshore activities}) and Scotland’s Primary Income Account (the difference between GNI and GDP for the whole of Scotland). These are the two largest components of a Balance of Payments Current Account estimate. The missing element is Scotland’s secondary income account which is primarily flows between Scottish and non-Scottish households and inter-Governmental transfers.

This Special Project is more of a longer term proposal. We shall probably tackle this in component parts and publish experimental estimates for each strand when complete. It is likely that this work will involve a lot of user consultation as there will be many definitional and classification issues to address in the process.

Earlier Publication of GDP

Many users have requested earlier estimates of our headline GDP statistics. Prior to 2016/17, GDP was usually published between 100-110 days after the end of the reference period. Over the last year this has been reduced below 100 days in most quarters, except for the January publication for 2017 Q2 at around 110 days.

This Special Project has looked at ways of further reducing the time to publication by exploring which of the key components can be completed earlier, or provisionally replaced by suitable alternative data.

The forthcoming publications for 2018 Q2 and 2018 Q3 are planned for 19 September 2018 and 19 December 2018 (approx. 80 days). More detailed information on the proposed publication and revisions schedules is set out in Annex C.1.

Sub-Scotland economic statistics

Many users of Scottish economic statistics have requested more figures for sub-Scottish geographies. There is in fact little economic data available for say Local Authorities or Health Board areas. There is increasing interest in local area statistics, especially relating to identifying and reducing poverty as part of the Inclusive Growth agenda. Community Planning Partners (across local government, Police Scotland, the Fire and Rescue Service, Health Boards etc) have identified lack of local economic data as a major issue when analysing their areas of poverty, establishing local trends and measuring progress over time.

Following the Scottish Economic Statistics Plan 2017/18, a working group was set up to take this issue forward – its remit is set out below.

Remit for the Sub-Scotland Economic Statistics Group (SSESG)

The purpose of the Group is to identify the key strategic statistical information required by all interested parties, and to develop and implement a strategy for prioritising and meeting these needs while minimising, where possible, the burden on data suppliers and maintaining quality fit for purpose. In these respects the group will:

- consider existing Sub-Scotland economic statistics, in order to identify gaps;
- provide advice on prioritising and filling gap areas, and on any additional resource implications;
- consider the options for effective dissemination of sub-Scotland economic statistics in ways which will provide for maximum access, ease of understanding and use;
- consider different channels through which future work might be pursued;
- develop, maintain and promote sub-Scotland geographies for the publication of economic, business and labour market statistics;
- liaise, and support work of, wider UK groups focussed on economic statistics for sub-UK areas;
- provide feedback on progress to SESCOG.

The group consists of members from:

Scottish Government
Office for National Statistics
Scottish Enterprise
Highlands and Islands Enterprise
Improvement Service
South Lanarkshire Council
South Ayrshire Council
City of Aberdeen Council
Biggar Economics
Glasgow Centre for Population Health

There have been three meetings to date. Further details are available here: <http://www.gov.scot/Topics/Statistics/Browse/Economy/ScotStat/comms>

A work programme for 2018/19 is set out in Annex C.2.

Natural Capital Accounts

In 2011, Department for Environment, Food & Rural Affairs (Defra) committed to working with the ONS to measure the value of UK natural capital (see Natural Environment White Paper, 2012-13). Since then, the ONS has collaborated with Defra to develop innovative methods to measure this strand of

³ <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature>

economic statistics, with an objective of including UK Natural Capital estimates in the UK Environmental Accounts by 2020.

This year we have commissioned ONS to produce a set of top down ecosystem service accounts for Scotland. The accounts will be the Scottish equivalent of the UK Accounts published here.

When developing these accounts the Defra-ONS Principles of Natural Capital Accounting, the System of Environmental-Economic Accounting (SEEA) frameworks, the UK National Ecosystem Assessment (UK NEA) reports and the System for National Accounting (SNA) will be taken into account, as well as other emerging ecosystem accounting guidance from the UN and World Bank.

The Scottish Natural Capital Asset Index will be referred to heavily to ensure consistency with this existing environmental monitoring framework. The Sustainable Development Goals will also be considered, again to ensure consistency with wider global well-being frameworks.

The final report will contain:

Accounts for at least 10 ecosystem services

Both physical and monetary flow accounts

Monetary asset accounts

Methodology

Excel reference tables

Analysis and write up suitable for publication

and will be available in the summer of 2019.

Extending our Outreach

In addition, we plan to extend our outreach to a wider cross section of users. This will include people in business who can give us insight into factors that affect the economy. In addition we will strengthen our links with academic colleagues and local users of data. For example, we are setting up a number of SESCOG subgroups including the local economic stats group (mentioned above).

We shall also work with ONS on the bid to host the 2019 International IO Association Conference in Glasgow. And, if successful, play roles on the organising Committee.

ANNEX C.1

OFFICE OF THE CHIEF ECONOMIC ADVISER, SCOTTISH GOVERNMENT

Scotland's Gross Domestic Product: Earlier Publications And Updated Revisions Policy

The Scottish Government is introducing a new publishing model for Quarterly GDP to provide a more timely measure of Scotland's economic performance.

Starting in September 2018, Scotland's GDP growth will change from normally being updated once each quarter to a cycle of two updates, similar to the new publishing model being introduced by ONS for UK GDP statistics.

- There will be an earlier 'first estimate' of GDP released approximately 80 days after the end of each quarter, instead of the 95-110 days currently.
- This will be followed by an updated 'second estimate' of GDP in Quarterly National Accounts Scotland (QNAS) at approximately 120-130 days after the end of the quarter.
- These publications will be 5 ½ weeks after the corresponding UK new First Estimate of GDP, and 4 ½ to 5 ½ weeks after the UK Quarterly National Accounts respectively.

This change is being made in response to requests from across the user community, and will enhance the public value of the statistics by supporting society's needs for information.

An information explaining the developments in more detail has been published at <http://www.gov.scot/Topics/Statistics/Browse/Economy/GDP/Methods/EarlierGDP2018>

This paper sets out the changes to methodology required, and the expected impact on the reliability of the statistics. The move to two updates of GDP each quarter will also require a new approach to the handling of any revisions in the statistics, which is also explained in the paper.

The changes can be summarised as follows:

- The new first estimate of GDP will continue to use exactly the same data for around 88% of the economy as currently used in Scotland's GDP statistics.
- New provisional data sources used for the remaining 12% of Scotland GDP will be derived from UK GDP sources, ensuring that the first estimate for Scotland is directly comparable to the first estimate for the UK.
- The new second estimate in QNAS will include all the data currently used in Scotland's GDP, plus some additional results not usually included until the following quarter. The second estimate will be directly comparable to the UK Quarterly National Accounts.

ANNEX C.2

OFFICE OF THE CHIEF ECONOMIC ADVISER, SCOTTISH GOVERNMENT

Sub-Scotland Economic Statistics Group 2018-2019 work plan

The work plan for the year ahead was discussed at the SSES meeting on 30 May. We agreed that we would focus on the needs of key stakeholders as identified by the Scottish Parliament's Economy, Jobs and Fair Work Committee, such as the Scottish Fiscal Commission, the Enterprise Agencies, City Regions and Community Planning partners. We also agreed that the National Performance Framework, which is currently being revised, would be a good starting point for identifying key economic statistics for sub-Scotland disaggregation. We looked at the indicators relating to the Economy Outcomes and the Fair Work and Business Outcomes; and decided to return to the Poverty Outcomes at a future meeting.

We agreed to consider the lowest geographical level for which data are reliable, and to take a view on whether "modelled" estimates are possible for smaller geographical areas, and whether these could be aggregated, in a meaningful way, to other flexible geographies of interest.

We also agreed to consider the presentation and accessibility of these statistics so that users can access the data easily and be fully aware of their potential uses, strengths and limitations.

Current proposed work plan

1) Explore new data sources and methods to provide sub-regional breakdowns of relevant National Performance Framework indicators where possible. For the 2018-19 year we will:

- a) Productivity: Develop a nominal productivity measure for local authority areas that is consistent with the Scotland level head-line indicator. Experimental statistics to be produced by end of 2018/19
- b) International Exports: Develop a nominal value for international export values by local authority area with EU and non-EU breakdowns. Experimental statistics to be published by Summer 2018
- c) Economic growth: Develop a real terms GDP measure at local authority area level. Experimental statistics to be produced by end of 2018/19
- d) Spend on Research and Development: Develop GERD estimates at local authority area level by end of 2018/19
- e) Innovative businesses: Develop innovative active business estimates at local authority area level by end of 2018/19
- f) Labour market indicators: Investigate the feasibility to estimate at local authority area level or below if possible

- 2) **Disseminate a wider range of sub-Scotland economic statistics via the Open Data Platform (www.statictics.gov.scot). Include any NPF indicators currently available below Scotland level.**
- 3) **Add a sub-Scotland section to the Scottish government statistics website, where stakeholders can easily find regional data.**
 - a) Produce, publish and maintain a Sub-Scotland Economic Statistics Data Sources map
 - b) Include a narrative to assist users of Scottish productivity (GVA) figures, possibly with case study examples

SSESG

6 June 2018

Main Achievements in 2017-18

This provides a high level summary of the main achievements in the previous year. Further details can be provided from the contacts mentioned in Annex F.

Short Term Economic Indicators

- Consulted on use of Index of Manufactured Exports publication and, based on user responses, incorporated the estimates into the Quarterly National Accounts publication.
- Improved the clarity and presentation of the Scotland's Gross Domestic Product and Retail Sales Index for Scotland publications.
- Developed supporting documentation for expert and non-expert users of GDP data, such as a sources and methods catalogue and a summary of the methodology used.
- Reduced production time for GDP to within 100 days of the end of the quarter in question (bringing the publication forward by two weeks).

Input-Output Modelling Team

- Developed the Extra Regio satellite account to allow estimation of Whole of Scotland Accounts and to improve modelling of the economic activity related to the offshore oil industry.
- Developed our ability to construct the Social Accounting Matrices at the heart of the Scottish Government Computable General Equilibrium model used by Economic Policy Modelling colleagues in OCEA. The latest 2 region model is to allow better analysis of Brexit implications. This work is ongoing and is hoped to become a regular output following publication of IO Tables.
- Changed the treatment of Social Transfers in Kind to bring them in line with European System of Accounts 2010 requirements.

Scottish National Accounts Coordination/ Public Sector Finances

- Brought forward the publication of GERS by seven months to August from the following March by improving methodologies and data processing systems.
- Provided additional information in response to feedback in the public consultation, covering: devolved revenue, expenditure; the fiscal framework; and public private partnerships (PPP) such as the Private Finance Initiative (PFI) and Non-Profit Distributing Model (NPD).
- Continued development of Labour Productivity Statistics, including accelerated production of annual estimates, production of quarterly productivity estimates, and labour productivity by industry groups.
- Developed quarterly business investment statistics based on Capital Expenditure (capex) survey results sourced from ONS, and continued to develop quarterly national accounts processing including the introduction of RTS (Regional Trade Statistics) imports data from HMRC new methodology.
- Developed experimental oil and gas production statistics into an annual Oil and Gas Production Statistics publication in September, and continued development of commodity balance and trade estimates for input to Energy In Scotland and future use in Extra-Regio satellite accounts.
- Introduced a new quarterly publication – Scottish Consumer Sentiment Indicator as a regular official experimental statistics.

Business and Innovation Statistics

- Continued to improve the range of statistics published in the Businesses in Scotland release with new series on ownership by country region and sector and ownership by country region and local authority area.
- Expanded the range of data provided on the Open Data Platform (www.statistics.gov.scot) including business births, deaths and survival rates.
- Improved the presentation and communication of our statistics including a new visual summary added to the Businesses in Scotland publication.

Trade Statistics

- Improved the presentation, commentary and analysis of the published export statistics, pre-empting increased scrutiny and interest due to Brexit.
- Developed and published an export statistics FAQs to help explain the key issues and deal with common misconceptions on the subject. This has been used extensively by Ministers, Senior officials, external commentators and members of the public.
- Increased use of HMRC's RTS to inform Ministers and Policy teams, following a significant change in their methodology to allocate trade to Scotland.

Energy & Climate Change Statistics

- Published new infographic summaries and online tools with our annual Energy in Scotland publication.
- Improved the analysis from the GHG emissions publication, with two additional shorter simpler publications aimed at distilling down some of the complex measurements to a wider audience, and improved the EU/ Devolved administration emissions comparisons.
- The Scotland Energy Balance underwent methodological improvements, as well as providing a simplified sankey diagram to improve the communication of the analysis.

Labour Market

- We led the development of economic and statistical evidence on Scotland's labour market, to inform the development of Scotland's Labour Market Strategy.
- We developed and published statistics and analysis on EU nationals in the Labour Market and played a lead role in the Scottish Government's response to the MAC's call for evidence on a post-Brexit migration system.
- We supported the evidence base that shaped the development and implementation of the Enterprise and Skills Review.
- Developed Scottish analysis of the Annual Population Survey to produce labour market indicators by industry, occupation and earnings for migrant workers in Scotland ([EU Nationals living and working in Scotland, 2015](#)).
- Also developed the range of analysis available on the Scottish Government website from the Annual Survey of Hours and Earnings to include a longer time series of Gender Pay gap statistics and to include gender pay gap based on full-time and all employees ([Annual Survey of Hours and Earnings, 2016](#)).

RESOURCES – STAFFING AND FINANCIAL

Total staff working on Scottish Economic statistics are 30 FTE (including 3 vacancies), working in two sites in Edinburgh and Glasgow.

Table 1 shows the total distribution of staff across the various themes as at 1 April 2018.

Table 1: Whole Time Equivalent Staff working on producing economic statistics in Scotland

Theme	2018-19	2018-19	2018-19
	actual	vacancy	Total
National Accounts			
Senior Statistician	1.0	0.0	1.0
Short Term Indicators	3.0	0.0	3.0
Input-Output modelling	3.0	0.0	3.0
National Accounts Coordination and Public Sector Finances	4.0	0.0	4.0
Total	11.0	0.0	11.0
Micro Economic Statistics			
Senior Statistician	1.0	0.0	1.0
Business and Innovation	4.0	0.0	4.0
Trade Statistics	2.0	1.0	3.0
Labour Market Statistics	5.0	0.0	5.0
Total	12.0	1.0	13.0
Employability, Skills and Labour Market			
Senior Statistician	1.0	0.0	1.0
Employability Statistics	1.6	0.0	1.6
Health and work Support (single gateway)	2.0	0.0	2.0
Total	4.6	0.0	4.6
Energy and Climate Change			
Energy Statistics	4.0	0.0	4.0
Climate Change	2.0	0.0	2.0
Total	6.0	0.0	6.0
Overall Total	33.6	1.0	34.6
Of which			
Senior Statistician	3.0	0.0	3.0
Statistician	10.0	0.0	10.0
Economist	1.0	0.0	1.0
Senior Assistant Statistician	8.0	0.0	8.0
Assistant Statistician	9.6	1.0	10.6
Data Analyst	1.0	0.0	1.0
Admin and Survey Support Officer	1.0	0.0	1.0
Overall Total	33.6	1.0	34.6

DATA PURCHASE COSTS FROM THE OFFICE FOR NATIONAL STATISTICS

In order to produce the range of economic statistics for Scotland, data from many sources are used. This includes data collected by the Scottish Government from specific companies in Scotland (e.g. the Global Connections Survey), the Scottish sample from UK-wide surveys (in particular from ONS), boosts to UK surveys to provide suitable data for Scotland (such as the boost to the Labour Force Survey and the Business Register Employment Survey), and some ad-hoc analyses. The Scottish Government pays for the survey boosts and also the processing costs of the data extraction from UK surveys. Costs are agreed and set out in a Service Level Agreement. Table 2 below sets out these costs for the past three years.

Table 2: Cost of Purchasing data 2015-16 to 2017-18

Project	Cost (£) (including VAT)		
	2015-16	2016-17	2017-18
ONS – Statistical Data Services	24,500	14,000	14,000
IDBR – Data Provision	5,100	5,300	2,700
ABS – Sample Boost and processing	76,000	66,800	56,300
BRES – Sample Boost and processing	53,300	54,100	55,200
Total	158,900	140,200	128,200

Note: ONS = Office for National Statistics; IDBR = Inter-Departmental Business Register; ABS = Annual Business Survey; BRES = Business Register Employment Survey.

Table 3: Cost of purchasing data 2015-16 to 2017-18 (Households Surveys)

Project	Cost (£) (including VAT)		
	2015-16	2016-17	2017-18
ONS – Boost to the Labour Force Survey	1,152,000	1,178,000	1,011,000

SURVEY RESPONSE BURDEN

Most of the economic and labour market statistics produced by the Scottish Government are derived from data that are collected by the Office for National Statistics as part of the national collection for the UK. Where this is the case, we assume that the estimates for Scotland are derived with no additional burden to business.

There are however a few areas where there is a burden:

The only statistical survey carried out by the Scottish Government underpinning the outputs in this report is the Global Connections Survey. In the latest survey (2016), we asked respondents to indicate how long the survey form took to complete and the cost to the business of completion. The median completion time was 30 minutes and the median hourly rate was £45 per hour. The overall cost to businesses of conducting the survey in 2016 is estimated to be £76,200.

We also receive information directly from a number of companies for the compilation of GDP(O). This includes some large companies (especially in the banking, petro-chemicals, and energy sectors). This information is provided freely and voluntarily – we do not have estimates of the response burden.

STATISTICAL RESOURCES AND RESPONSIBILITIES

Contacts on 1 April 2018

National Accounts Team

Sandy Stewart (Sandy.Stewart@gov.scot) – Senior Statistician – 0300 244 2825

Short Term Indicators Team

Functions:

Quarterly Scottish GDP(O)

Retail Sales Index for Scotland (RSIS)

Statistical Staff:

John Dowens (John.Dowens@gov.scot) – Statistician - 0300 244 2827

Carrie Graham (Carrie.Graham@gov.scot) - Statistician – 0300 244 3768

Gordon Bryden (Gordon.Bryden@gov.scot) – Assistant Statistician - 0300 244 3772

Input-Output Modelling Team

Functions:

Supply and Use tables

Input Output Analytical tables

Environmental Input-Output model

Economic multipliers and impact analysis

Greenhouse Gas Impact analysis

Statistical Staff:

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Scottish National Accounts Coordination/ Scottish Public Sector Finances

Functions:

Government Expenditure and Revenue Scotland

Public Sector Finances in Scotland

National Accounts Coordination

Quarterly National Accounts for Scotland

Labour Productivity

Oil and Gas Statistics

Statistical Staff:

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Micro-Economic Statistics

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Business and Innovation Statistics Team

Functions:

Statistics on Industry Sectors
Business Demography Statistics
Research & Development Statistics
Business Innovation Statistics
Business Data Matching

Statistical Staff:

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Trade Statistics Team

Functions:

Export Statistics Scotland

Management of Global Connections Survey
Statistical Advice on Trade Statistics
Liaison with Scottish Development International on Trade Statistics
Liaison with HMRC on Trade Statistics

Statistical Staff:

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Labour Market Statistics Team

Functions:

Labour Market Statistics
Youth Labour Market Statistics
Earnings- pay gap and living wage
Public Sector Employment
Work and Workless Households
Migrant Workforce
PACE Redundancy

Statistical Staff:

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Employability Skills and Labour Market Analysis Unit

Functions

Employability Statistics
Health and Work Support Project Evaluation

Statistical Staff

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Energy and Climate Change

Energy & Climate Change Statistics

Functions:

Energy Statistics

Heat Map

Climate Change Modelling

Climate Change Statistics

Statistical Staff:

Energy

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Climate Change

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Natural Capital Accounts

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