

# Statistics Jersey at the GSS conference 2018



Sarah Davis  
*s.davis2@gov.je*

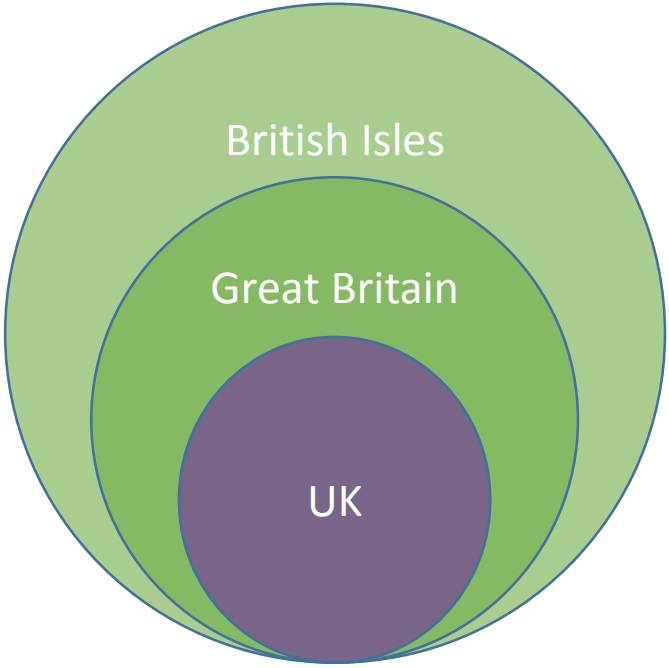
# Statistics Jersey at the GSS conference 2018



- **Where and what is Jersey?**
- **Who are Statistics Jersey?**
- **A statts tour of our Island...**
  
- **The future for Statistics Jersey:**
  - **our new law**
  - **transforming our outputs through administrative data sources**

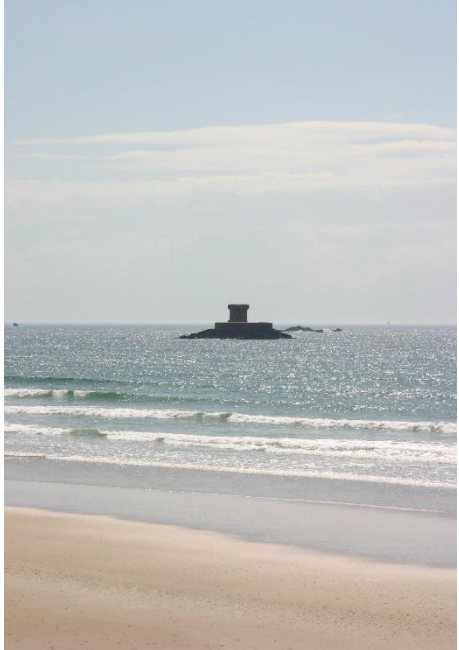
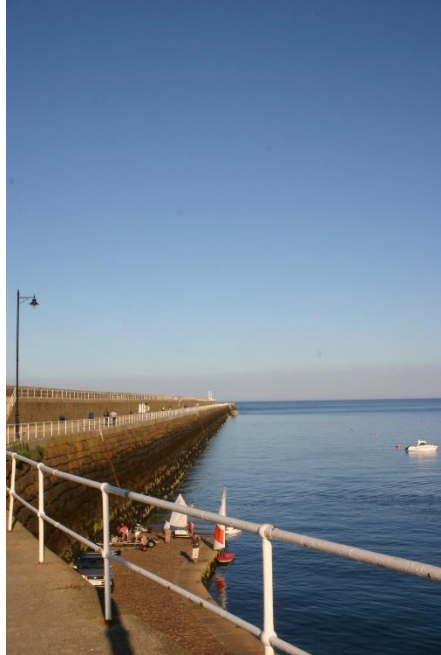
# Statistics Jersey at the GSS conference 2018

## Where and what is Jersey?



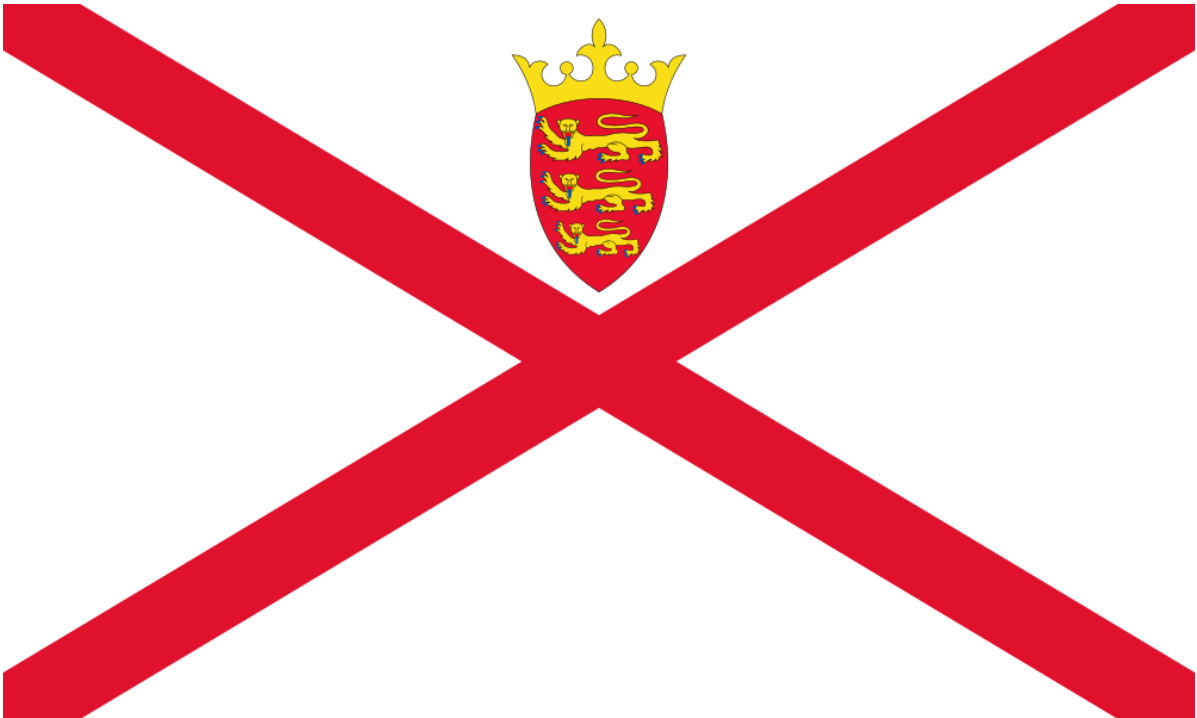
# Statistics Jersey at the GSS conference 2018

## Where and what is Jersey?



# Statistics Jersey at the GSS conference 2018

## Where and what is Jersey?



### The provider of official statistics for Jersey:

“Statistics Jersey is responsible for the collection and processing of data for statistical purposes in accordance with this Law with the aim of –

- (a) providing statistical reports of interest to, and which assist with decision-making by, **public authorities, other undertakings and individuals** (including the general public);
- (b) contributing to public policy development and the delivery of public services; and
- (c) co-ordinating as effectively as possible and rendering useful the information produced from the data **and avoiding unnecessary duplication** of requests for information.”

#### Key points in the law:

- We are there for everyone
- Our work is protected from political interference
- We can now mandate businesses to respond to our surveys
- We have a legal gateway for accessing administrative data – indeed a duty to utilise it wherever possible

# Statistics Jersey – who we are

## What we do



### Chief Statistician

#### Business and economy

- labour market
- average earnings index
- finance sector survey
- business tendency survey
- GVA & GDP
- retail prices index
- house price index
- housing affordability
- unemployment
- purchasing power parity



#### People statistics

- population
- population projections
- census
- e-census
- opinions & lifestyle survey
- school survey
- income distribution survey
- household spending survey



#### Public health

- mortality & fertility
- alcohol profile
- smoking profile
- diet profile
- obesity rates
- incidence rates & projections



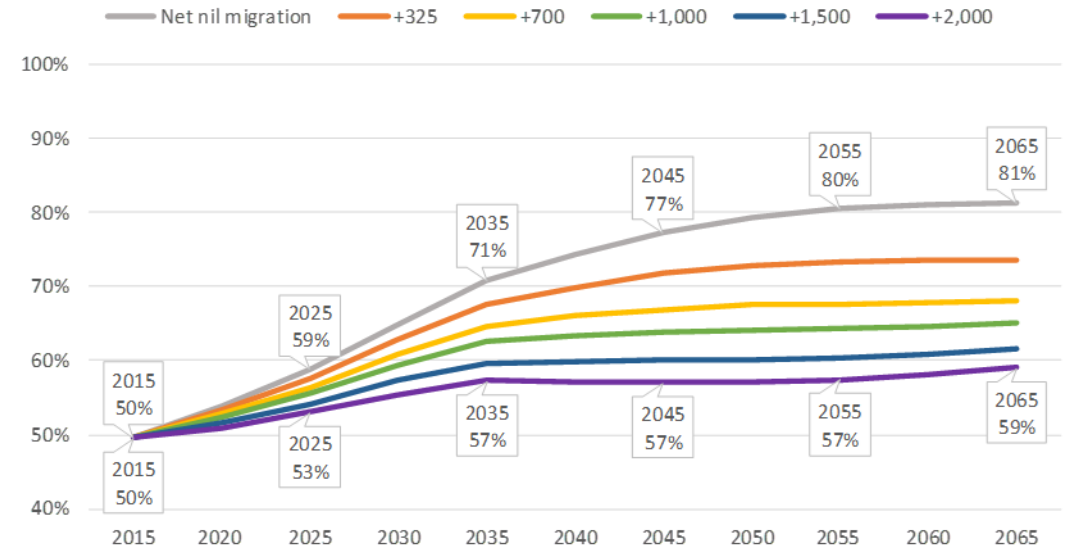
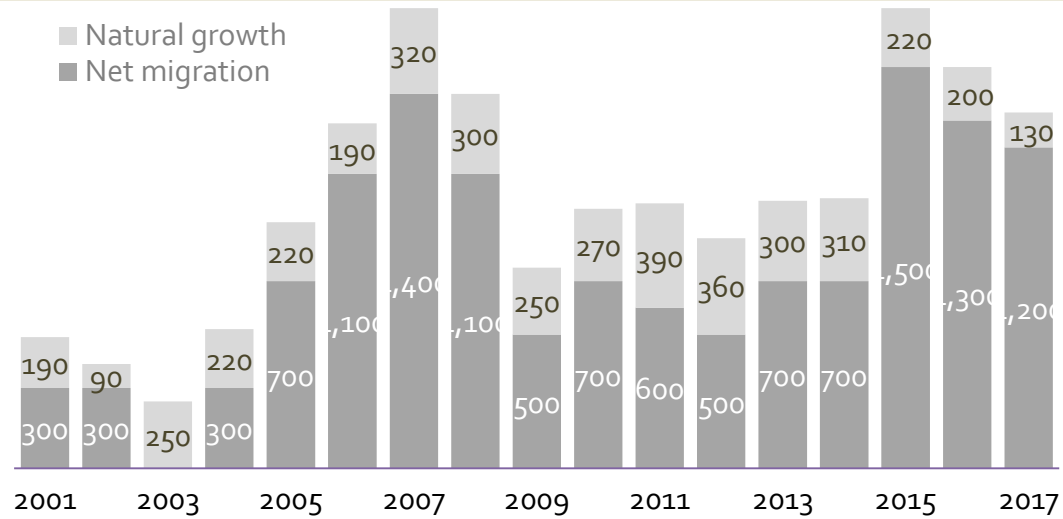
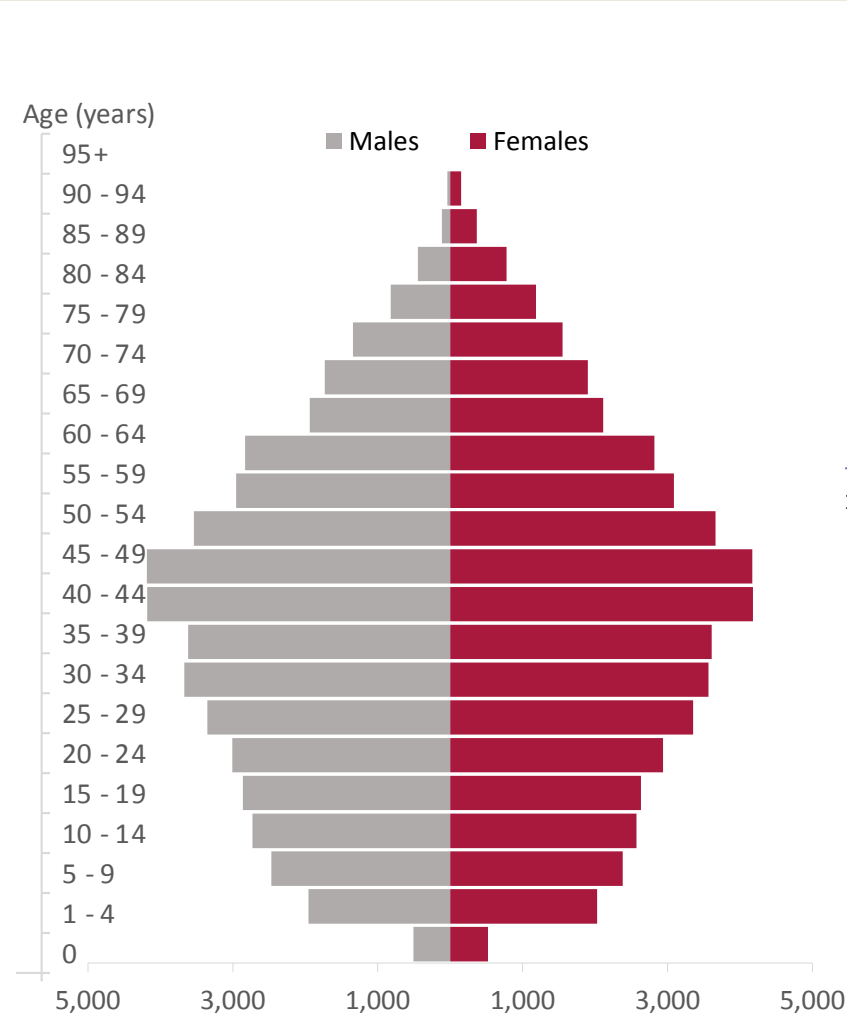
#### Ad-hoc and future changes

- ad-hoc queries from:
  - ministers
  - chief officers
  - the public
  - businesses
- advice e.g:
  - data analysis
  - survey design
- additional stats in future:
  - education
  - tourism



# A statto's tour of Jersey

## Population

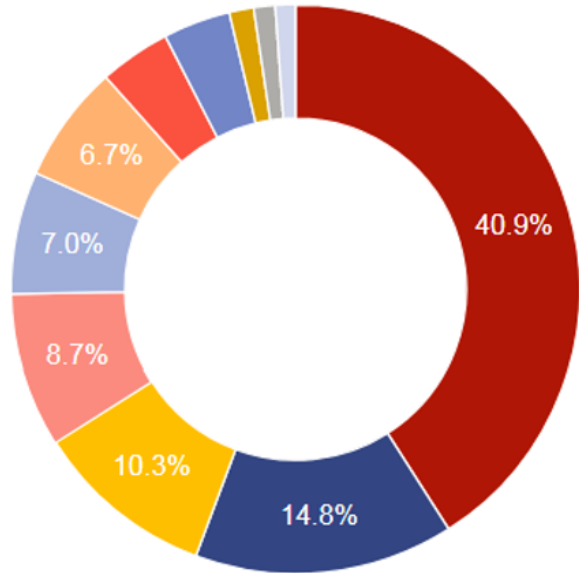




# A stato's tour of Jersey

## Business and economy

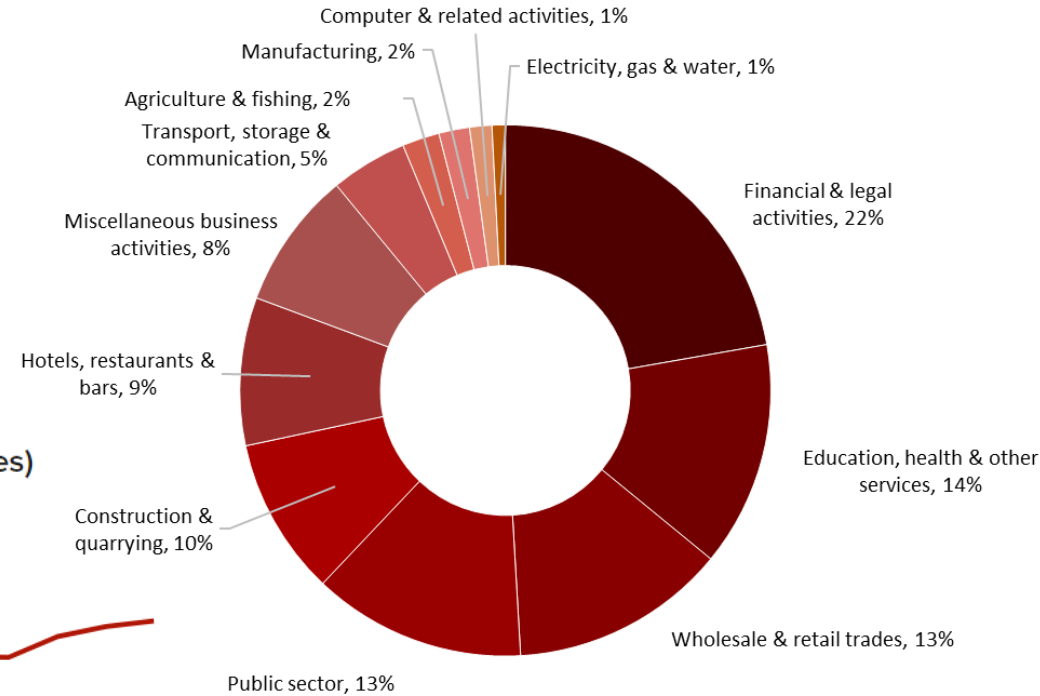
Gross Value Added by sector



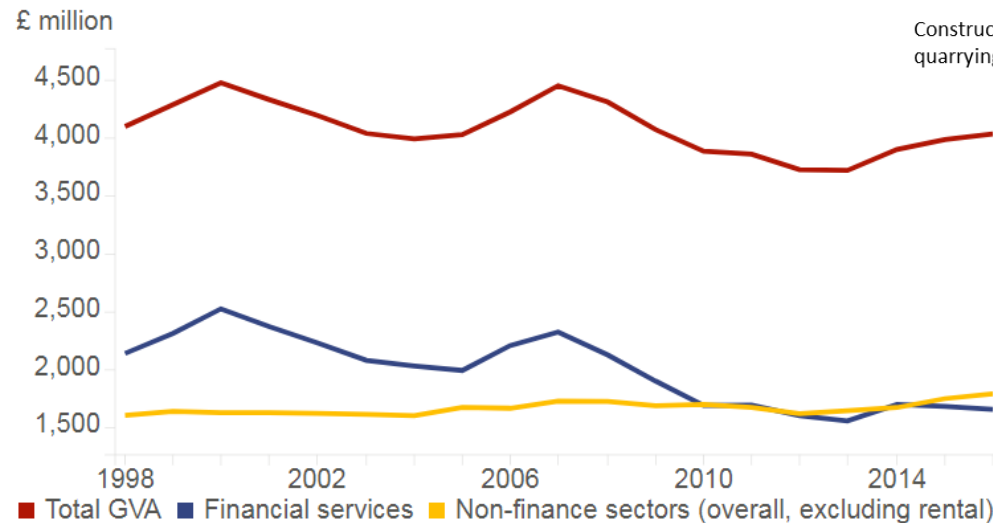
- Financial services
- Rental income of private households
- Other business activities (excluding rental)
- Public administration
- Wholesale & retail
- Construction
- Hotels, restaurants & bars
- Transport, storage and communication
- Electricity, gas & water
- Agriculture
- Manufacturing



Workforce distribution



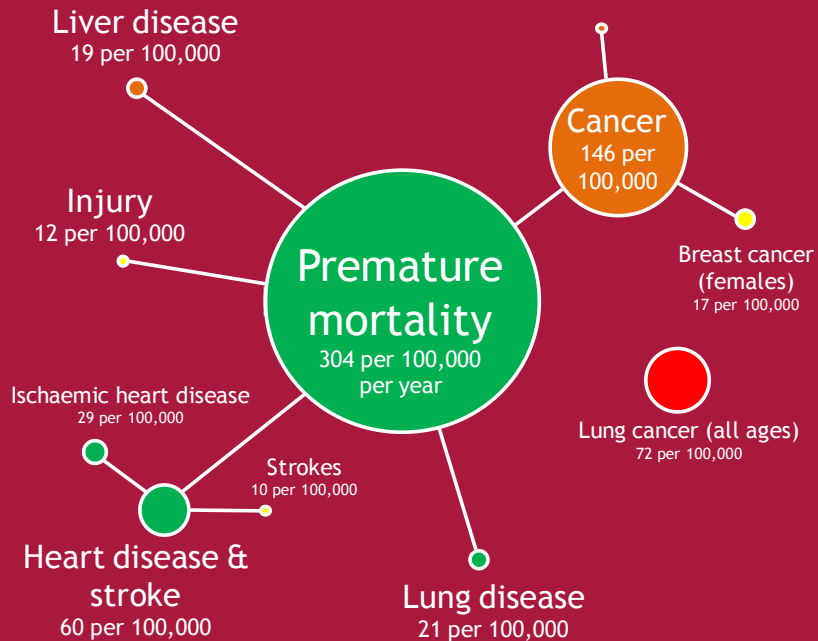
Gross Value Added by major sector (constant 2013 values)



# A stato's tour of Jersey

## Public health

Our premature mortality rates are generally similar or lower than those in England...except for lung cancer...



Jersey has the highest per capita consumption of alcohol in Europe



Since our smoking ban was introduced in 2007, smoking rates have declined

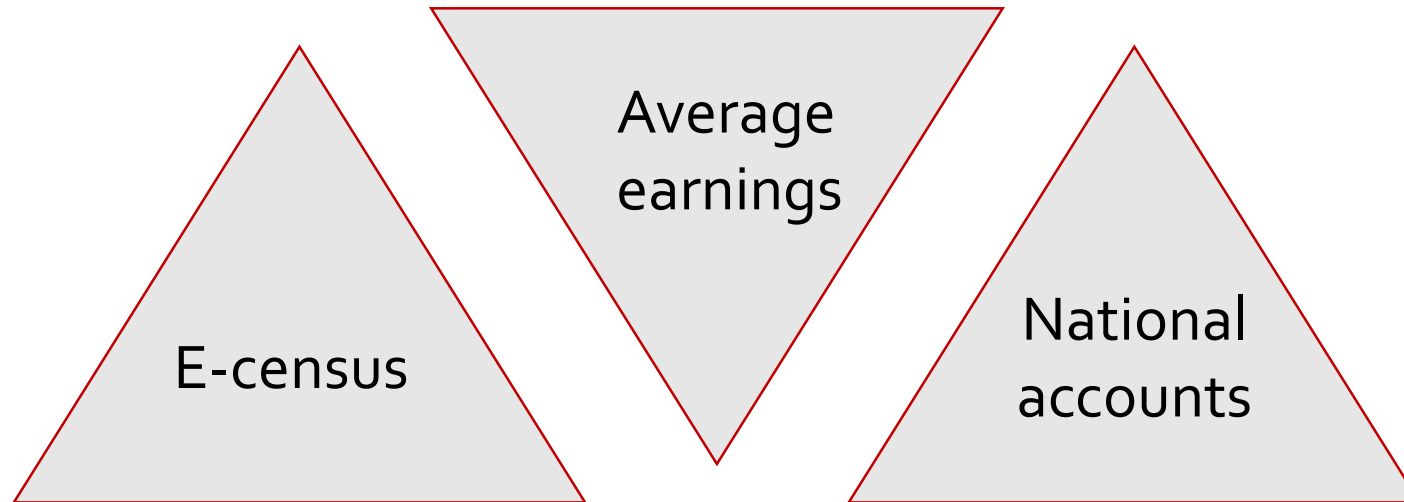


# Administrative data

## The future of Stats Jersey?

“For the purposes of a census, Statistics Jersey must, at such intervals as the Chief Statistician directs, analyse and link data collected for administrative purposes **already in the possession of Statistics Jersey or readily obtainable** by it.”

“Statistics Jersey must **seek to avoid collecting data** where data collected for administrative purposes is readily accessible, of suitable quality and sufficiently up to date to enable it to carry out its functions under this Law.”



# Administrative data e-census – why?

## Population measurement can be:

- More frequent
- More timely
- At less cost (?)
- Longitudinal
- Less burdensome

## But:

- Loss of time series
- Reliance on admin data quality – susceptible to policy and practise
- Relies on relevant concepts being adequately captured by admin data source
- Loss of family history?

# Administrative data

## e-census



Preschool Health

Student finance

Youth service

Highlands higher and adult education centre

School census

Manpower

Social security

# Administrative data

## e-census

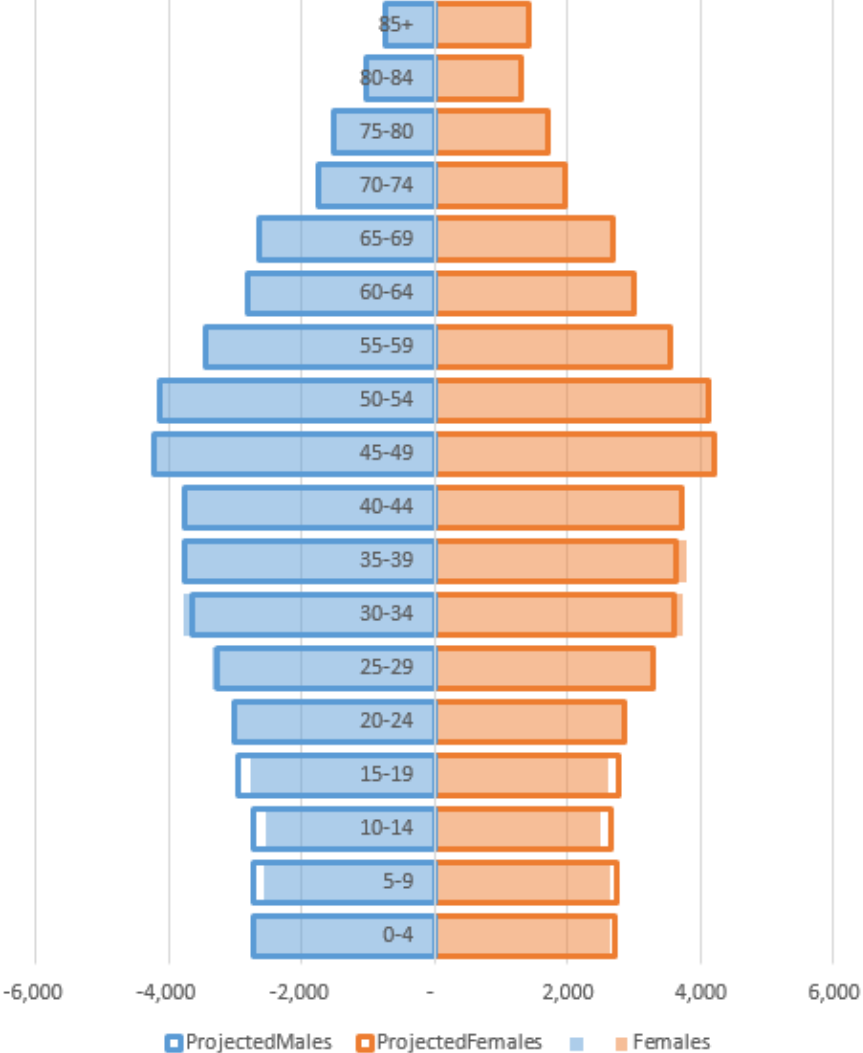
Quarter	2015-1	2015-2	2015-3	2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3
Nessie-HasContCredit											
Nessie-ContExemption											
Nessie-HasMedicalBen		Y						Y			
Nessie-HasRegCard			Y								
Nessie-HasClass1			Y	Y	Y	Y					
Nessie-IsASW	Y	Y									
Nessie-HasClass2											
Nessie-HasOtherBen											
Nessie-IsSorISRC	Y	Y									
Nessie-HasNonPayingElection											
Nessie-OnIsland											
Nessie-OffIsland											
Nessie-OnIslandAndOtherBen											
Nessie-1-OnIslandEoR											
PreschoolHealth-AttendedImmsOrExamInYear											
PreschoolHealth-RecordedAsInJersey											
SchoolRoll-OnSchoolRoll											
SchoolRoll-PossibleUKBoarderNextYr											
Highlands-EnrolledOnCourseInQEnding	Y	Y	Y	Y							
Highlands-OnRoll	Y	Y	Y	Y							
Highlands-EnrolledOnCourseOnDay	Y	Y	Y	Y							
StudentFinance-AtUni											

# Administrative data

## e-census



	Set A weights	
	Males	Females
0-4	2,712	2,634
5-9	2,573	2,647
10-14	2,533	2,502
15-19	2,753	2,618
20-24	3,041	2,889
25-29	3,337	3,313
30-34	3,761	3,742
35-39	3,815	3,785
40-44	3,783	3,750
45-49	4,239	4,258
50-54	4,169	4,123
55-59	3,445	3,558
60-64	2,810	2,944
65-69	2,584	2,682
70-74	1,730	1,983
75-80	1,529	1,746
80-84	1,023	1,300
85+	738	1,419
Total	50,571	51,889
<b>Total</b>		<b>102,460</b>



# Administrative data

## Average earnings index

### Currently:

- annual *voluntary* survey of businesses in June
- coverage is 44% of total workforce
- aggregate data for gross wages in June
- uses “matched pair” methodology phased out by ONS in 2010

### Issues:

- falling response rates
- annual survey – unable to track monthly changes
- not possible to calculate median
- no information on distribution of earnings
- demographic breakdown not possible (age, gender)

Response rate for average earnings survey 2006-2018





# Administrative data

## Average earnings index

### Administrative data sources:

- ✓ • **Social Security department** – employee contributions (similar to national insurance)
  - Employers report monthly earnings information for (almost) **every employee** each quarter
  - Age, gender, residential status
  - Unique person reference (**JY number**)
  
- ✓ • **Population office** – 6-monthly Manpower survey
  - Employers report every employee (name and **JY number**)
  - Residential status, contract type
  - Employer industry is coded using Standard Industrial Classification
  
- ? • **Income tax** – employee earnings reported monthly
  - **JY number?**

# Administrative data

## Average earnings index

### Challenges:

- Paperwork:
  - Data sharing agreements
  - Data protection impact assessment
- Some gaps in social security dataset
- Data quality of admin sources currently unknown (issues record-linking)
- Lag in administrative data availability
- Potential break in time series
- Not possible to separate components of earnings e.g. bonuses

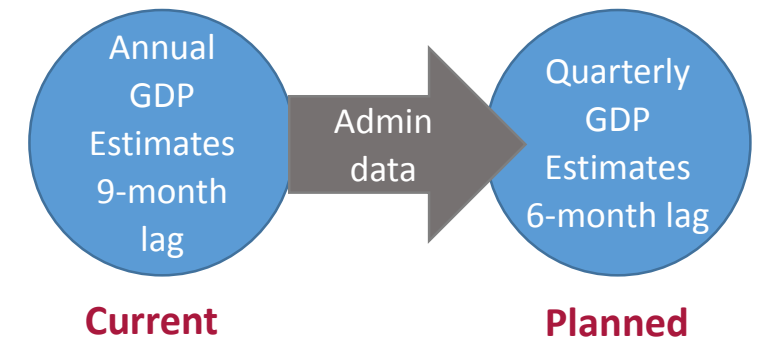
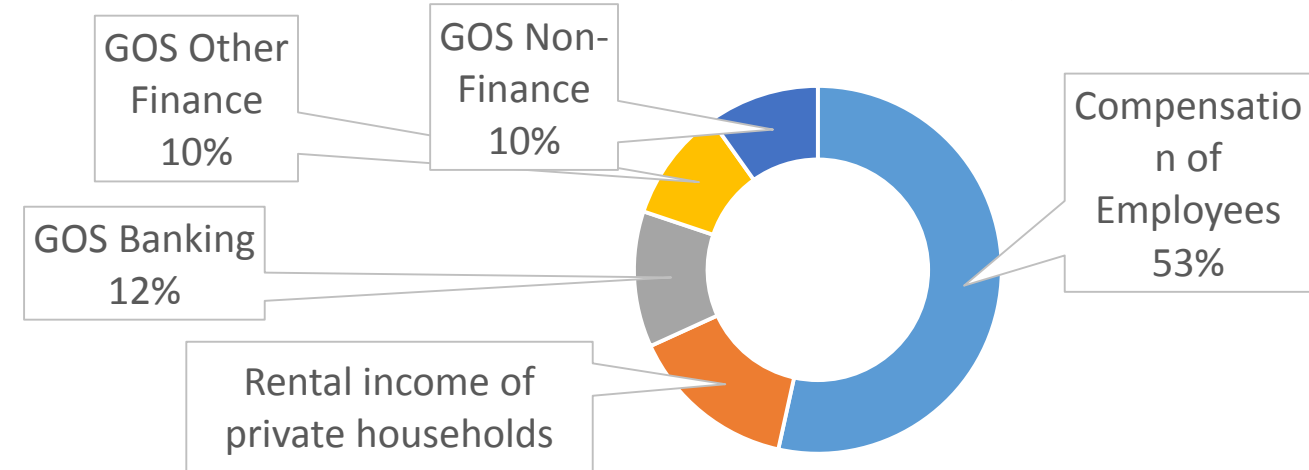
# Administrative data

## Increased frequency of national accounting measures

### Administrative data sources:

- **Compensation of employees**
  - Social security employee contributions
  - Income tax instalment scheme
- **Rental income of private households**
  - Population modelling
  - Quarterly rental and house price index
- **GOS Banking**
  - Jersey Financial Services Commission – Prudential reporting returns
- **GOS Finance**
  - GST returns (partial coverage)
  - Jersey Financial Services Commission – quarterly statistics
- **GOS Non-Finance**
  - GST returns (almost complete coverage)

### Main contributors to Jersey's GDP



**All administrative sources are updated at least quarterly**

Thank you for listening! Any questions?



*[www.gov.je/statistics](http://www.gov.je/statistics)*

*[statistics@gov.je](mailto:statistics@gov.je)*

 [@jsystats](https://twitter.com/jsystats)