

Indicators of Deprivation by Parish Vingtaines

Table of Contents

Summary	2
Introduction	3
Combined Index of Deprivation (including pensioners indicator)	5
Combined Index of Deprivation (excluding pensioners indicator)	6
Overcrowding	7
Unemployment	8
No Car	9
Routine and Manual Occupations	10
Non Owner-Occupied Households	11
No Educational Qualifications	12
Pensioners	13
Children Under Five	14
Single Parent Households	15
Self-Reported Health Status	16
Notes	17
Contacts	17
Methodology	18
Appendix Tables	19

Indicators of Deprivation

Indicators included in combined index

Between 2011 and 2021, % of...



Pensioners



Single Parents



Non-Owner
Occupied
Households

... all **increased**



Overcrowding



Unemployment



Children Under 5



Routine and Manual
Occupations



No Educational
Qualifications



No Car

... all **decreased**



In 2021 the combined deprivation index indicates that households in **La Vingtaine de Bas du Mont au Pretre** in **St. Helier**

may be **more likely** to be materially **deprived**

In 2021 the combined deprivation index, when the pensioners component is excluded, indicates that **4** vingtaines around **St. Helier** town centre may be **more likely** to be materially **deprived**



Indicators that contributed to St. Helier vingtaines being more likely deprived in 2021



Routine and Manual
Occupations



Overcrowding



Children
Under 5



Non-Owner Occupied
Households



No Educational
Qualifications



No Car

Introduction

This report provides information on different indicators of deprivation by parish vingtaines in Jersey, using data from the Jersey Census 2021 and 2011. Indicators have been selected based on research conducted on other methods of deprivation indices such as the Carstairs method¹, Multiple Deprivation Index² (used in the UK), and Social Deprivation Index³, while taking into account availability of Jersey data.

The indicators describe characteristics of households that are known to be associated with material deprivation – some more directly than others – and therefore indicate the potential level of deprivation in a vingtaine. For example, one indicator of deprivation is the proportion of individuals in households that are ‘overcrowded’ and don’t have enough bedrooms for the occupants, based on the ‘bedroom standard’⁴. Being overcrowded may not necessarily indicate a household is materially deprived, but evidence suggests such households are more likely to be. Therefore, vingtaines with higher proportions displaying these characteristics are more likely to be areas of deprivation.

By combining indicators of characteristics that are associated with deprivation to create a combined Index of Deprivation for each geographical area, and comparing across Jersey, we can explore the *relative* deprivation of vingtaines.

A full list of the indicators described in this report and their definition is given in Table 1.

Table 1: Indicator Definitions

Indicator	Definition
Overcrowding	Proportion of individuals in private households that are ‘overcrowded’ according to the bedroom standard ⁴
Unemployment	Proportion of economically active individuals that are seeking or waiting to start work
No car	Proportion of individuals in private households that do not have a car or van available for use by members of the household
Routine and manual occupations	Proportion of individuals in private households with economically active heads of households, where the head has a routine or manual occupation ⁵
Non owner-occupied households	Proportion of occupied households that are not owner-occupier households
No educational qualifications	Proportion of individuals aged 16-64 with no formal educational qualifications
Pensioners	Proportion of individuals aged 65 and over
Children under 5	Proportion of children (under 16) in private households that are under 5 years of age
Single parent	Proportion of private households with 1 single parent ⁶
Self-reported health status	Those who rated their health as Very Poor or Poor ⁷

¹ ISD Services | Geography, Population and Deprivation Analytical Support Team | Deprivation | Carstairs | ISD Scotland

² English Indices of Deprivation 2019: technical report (publishing.service.gov.uk)

³ Social Deprivation Index (SDI) | Robert Graham Center (graham-center.org)

⁴ The ‘Bedroom Standard’ (UK Housing Overcrowding Bill, 2003) defines the number of bedrooms that would be required by the household, where a separate bedroom is allowed for each married or cohabiting couple, any adults aged 21 or over, pairs of adolescents aged 10-20 of the same sex and pairs of children under 10 years. Unpaired persons of 10-20 years are notionally paired with a child under 10 of the same sex.

⁵ Routine and Manual Occupations derived from classes 5-7 of NS-SEC codes, with household head selected as the household member who works full time, followed by part time and then the eldest

The National Statistics Socio-economic classification (NS-SEC) - Office for National Statistics (ons.gov.uk)

⁶ Single parent with adult children or single parent with dependent children

⁷ From the question - How is your health in general? Out of the responses - Very Good, Good, Fair, Poor, Very Poor

Table 2 summarises the proportion of individuals or households across Jersey for each component indicator in 2021 and in 2011, as well as the percentage point change.

Table 2: 2021 vs 2011 Indicators for Jersey

Indicator	2011 percent	2021 percent	Percentage Point change	Direction of change
Overcrowding	7.0	5.5	-1.5	↓
Total unemployment	4.7	3.5	-1.2	↓
No car	10.9	10.5	-0.4	↓
Routine and manual occupations	32.0	28.6	-3.4	↓
Non owner-occupied households	45.7	46.6	0.9	↑
No educational qualifications	22.4	15.6	-6.8	↓
Pensioners	14.8	18.1	3.4	↑
Children under 5	29.0	28.3	-0.7	↓
Single parent	7.9	8.3	0.4	↑
Self-reported health status	NA	4.1	NA	NA

Between 2011 and 2021:

- Proportions across Jersey of overcrowded households, people in households with no car, people in unemployment, working in routine and manual occupations, and with no educational qualifications, and proportion of children who were under five, all decreased
- The proportions of non owner-occupied households, pensioners, and single parent households, all increased

The Combined Index of Deprivation

The component indicator proportions for each vingtaine were standardised (so that no single indicator has more influence than others), and the standardised scores were added together to produce a composite value representing a combined index of deprivation, following the methodology in Morris and Carstairs 1991⁸. More detail is given in the Methodology section of this report.

Two combined indices were produced: one including the pensioners indicator, and one excluding it (each has value depending on the purpose).

These combined indices allow for a comparison of potential deprivation between vingtaines, giving an indication of which are more or less likely to be deprived.

⁸ Morris, R. and Carstairs, V. (1991) Which Deprivation? A Comparison of Selected Deprivation Indexes. *Journal of Public Health*, 13, 318-326.

Combined Index of Deprivation (including pensioners indicator)

- The combined index is a sum of standardised scores across all indicators in Table 1, excluding self-reported health⁹ as we do not have this indicator available for 2011.
- In 2021, the combined index suggests that La Vingtaine de Bas du Mont au Pretre was more likely to be materially deprived. La Vingtaine du Fief de la Reine in St. Martin along with three other vingtaines were less likely to be materially deprived (see Figure 1).
- In 2011, La Vingtaine de Bas du Mont au Pretre and Canton de Haut de la Vingtaine de la Ville in St. Helier were more likely to be materially deprived than other vingtaines (see Figure 2).

Figure 1: 2021 Combined Index of Deprivation

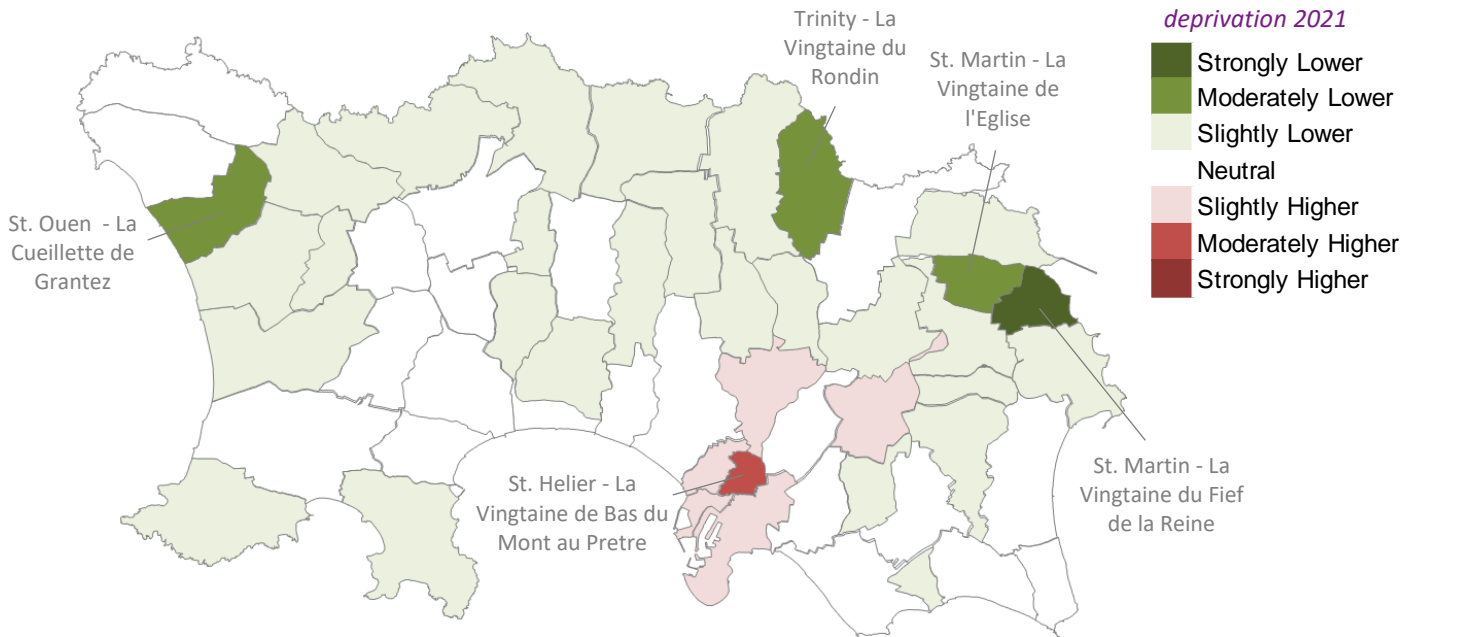
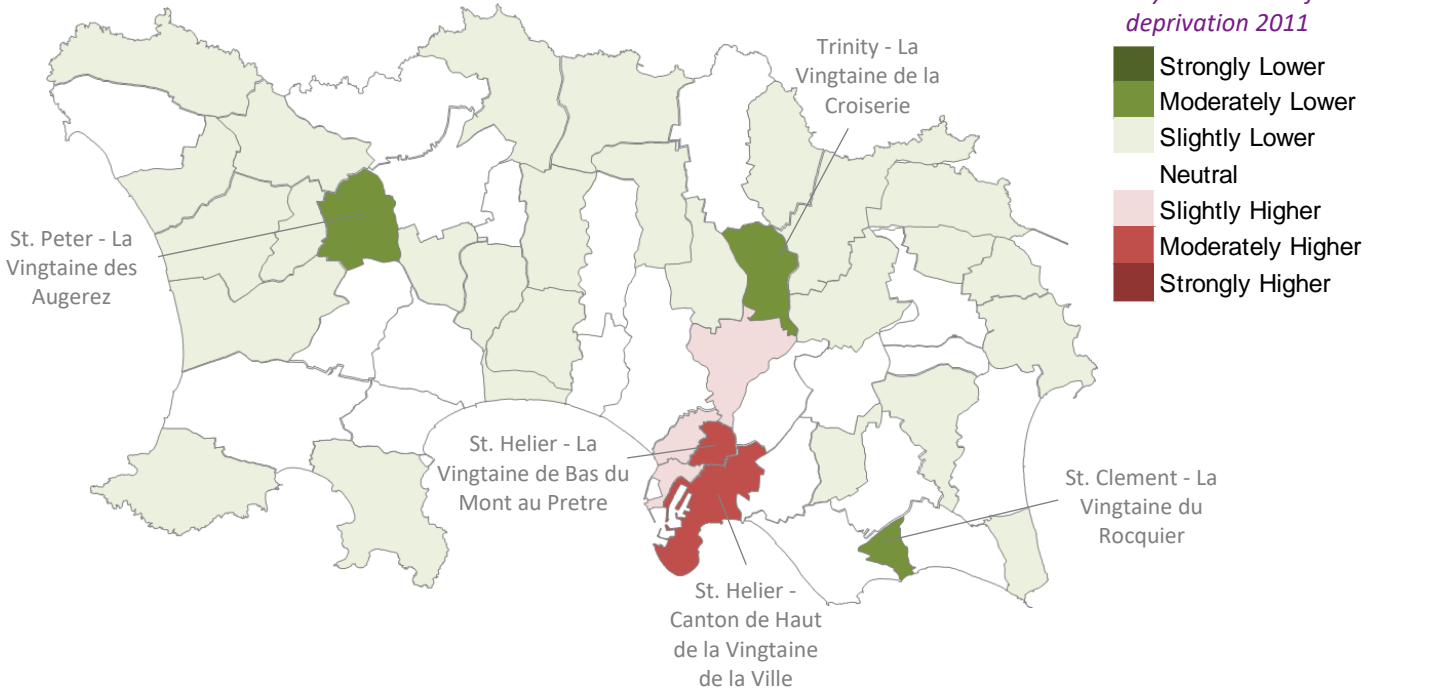


Figure 2: 2011 Combined Index of Deprivation



⁹ Including the self-reported health indicator within the combined index for 2021 did not change the outcome materially

Combined Index of Deprivation (excluding pensioners indicator)

- For some purposes, the proportion of pensioners would not be considered an indicator of deprivation (for example when specifically focussing on proportion of households with children that might be materially deprived), therefore a version excluding this indicator is shown. The self-reported health indicator is excluded from this combined index as we do not have this indicator available for 2011.
- In 2021, all four vingtaines around the centre of St. Helier were more likely to be materially deprived (when excluding the pensioners indicator) than the rest of the Island. La Vingtaine du Fief de la Reine in St. Martin was less likely to be materially deprived than other vingtaines when the pensioners indicator is excluded (see Figure 3).
- In 2011, the same four vingtaines around the centre of town were more likely to be materially deprived (when excluding the pensioners indicator) than the rest of the Island's vingtaines (see Figure 4).

Figure 3: 2021 Combined Index of Deprivation (excluding pensioners indicator)

Key: Likelihood of material deprivation 2021

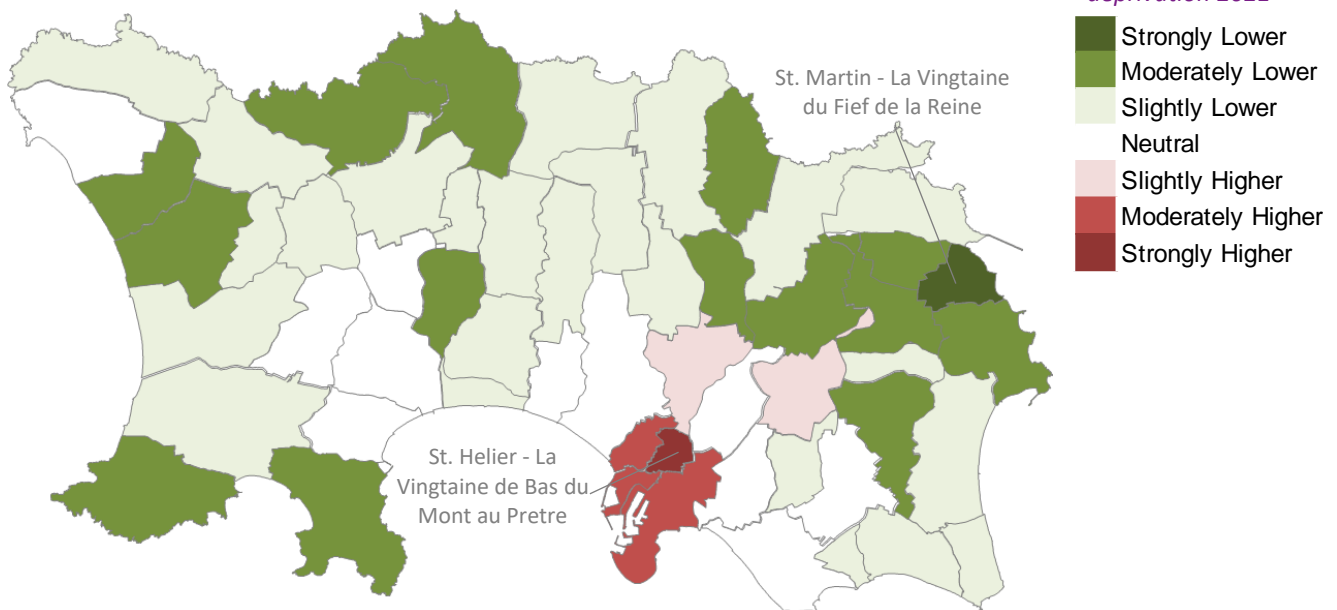
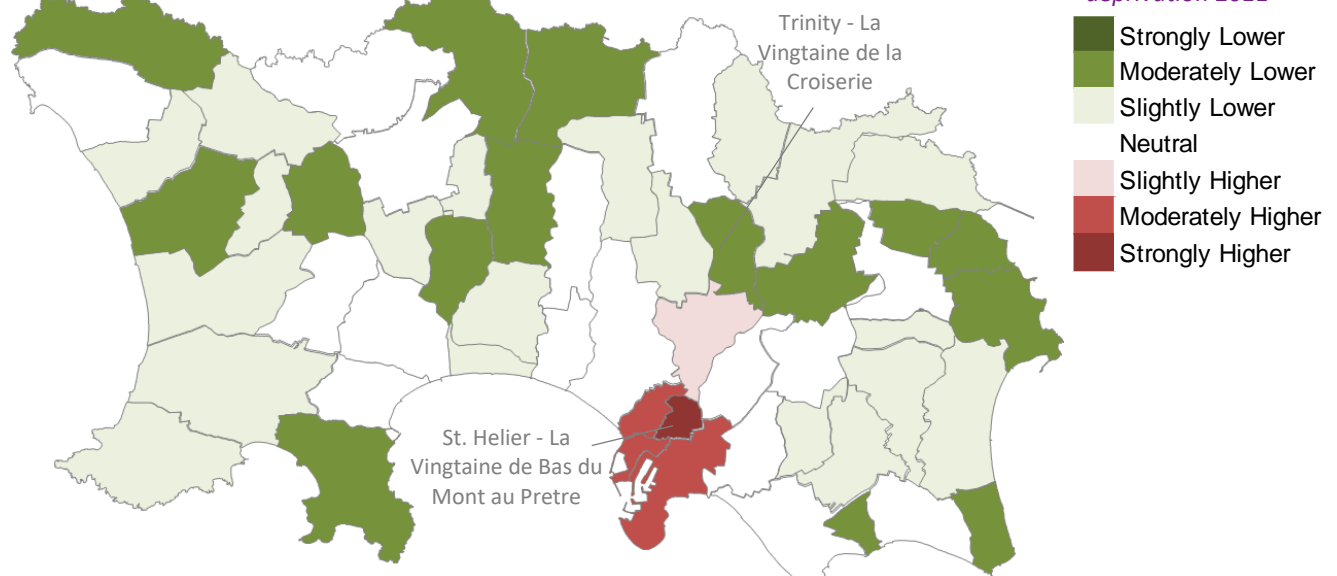


Figure 4: 2011 Combined Index of Deprivation (excluding pensioners indicator)

Key: Likelihood of material deprivation 2011



Overcrowding

- In 2021, across the whole of Jersey, around one in twenty (5.5%) people were living in households considered 'overcrowded' according to the bedroom standard⁴.
- Levels of overcrowding varied by vingtaine, from no-one (0.0%) living in overcrowded accommodation in La Vingtaine de la Croiserie in Trinity, to one in eight (12.0%) people living in La Vingtaine de Bas du Mont au Pretre, St. Helier (see Figure 5).
- La Vingtaine de Bas du Mont au Pretre (12.0%) had a moderately higher proportion of overcrowding compared to other Jersey vingtaines. In contrast, no vingtaines had a moderately or strongly lower proportion of overcrowding.
- The proportion of people living in overcrowded households in 2021 (5.5%) was lower than a decade previously (7.0%).
- Ten years previously, there were no vingtaines standing out as having a moderately or strongly higher or lower proportion of overcrowding (see Figure 6).

Figure 5: 2021 Overcrowding

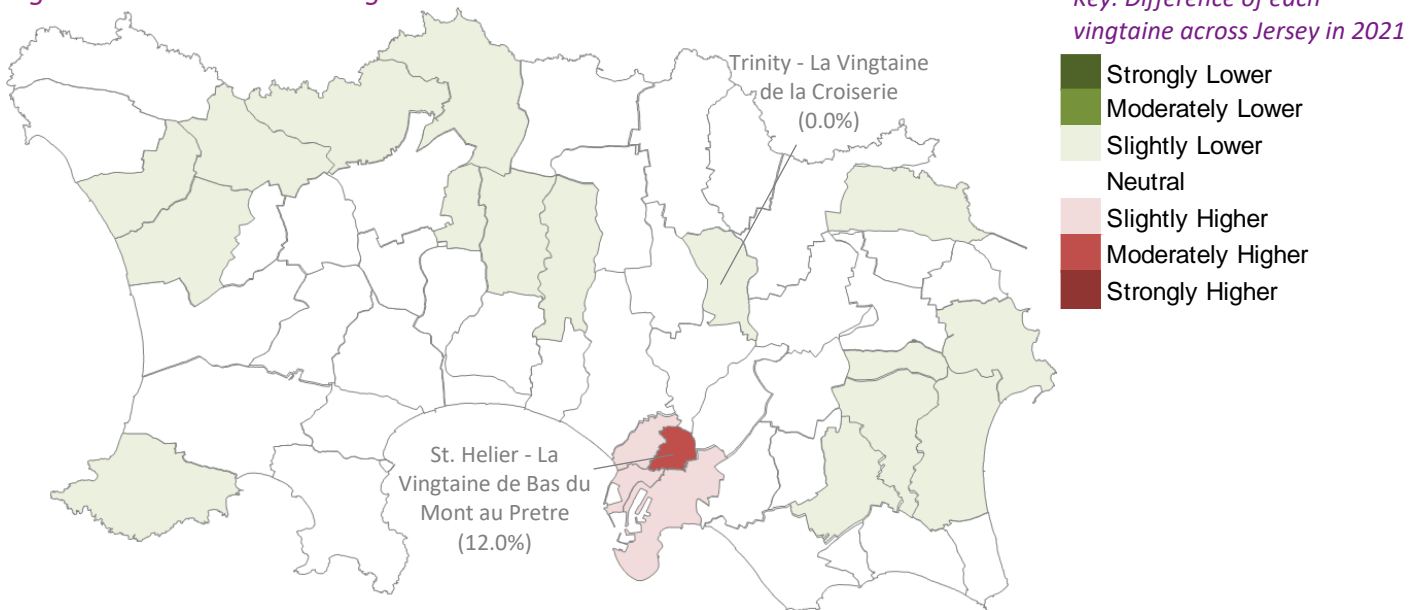
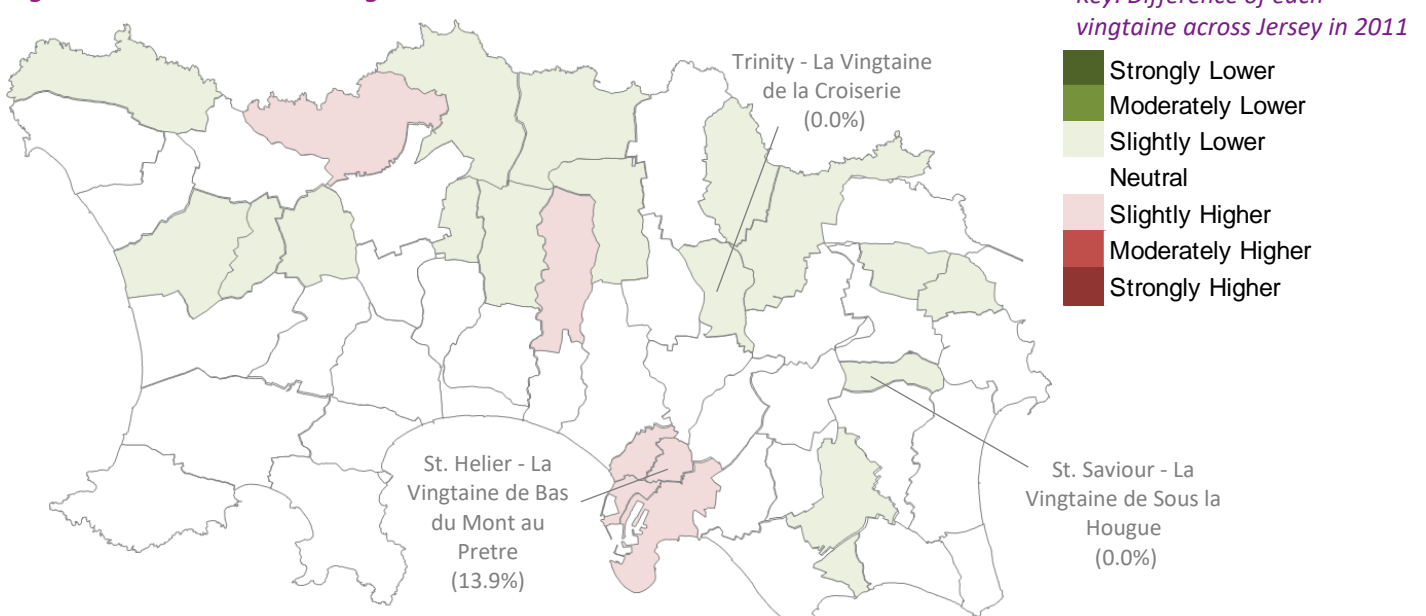


Figure 6: 2011 Overcrowding



Unemployment

- In 2021, across the whole of Jersey, around one in thirty (3.5%) economically active individuals were unemployed and seeking work.
- This varied by vingtaine, from around one in a hundred (1.1%) seeking employment in La Vingtaine du Coin Hatain in St. Lawrence, to around one in twenty (6.0%) people living in La Vingtaine de Longueville, Grouville (see Figure 7).
- In 2021, seven vingtaines had a moderately lower proportion of unemployment and one had a strongly lower proportion, than seen across all Jersey vingtaines. La Vingtaine de Longueville in Grouville (6.0%) had a strongly higher proportion and La Vingtaine des Pigneaux in St. Saviour (5.5%) had a moderately higher proportion of unemployment than other vingtaines: however, they did not have notably higher unemployment than ten years previously.
- Across Jersey, the proportion of people unemployed in 2021 (3.5%) was lower than a decade previously (4.7%).
- In 2011, four vingtaines had a moderately lower proportion of unemployment than proportions seen across other vingtaines, and no vingtaines had a moderately or strongly higher proportion (see Figure 8).

Figure 7: 2021 Unemployment

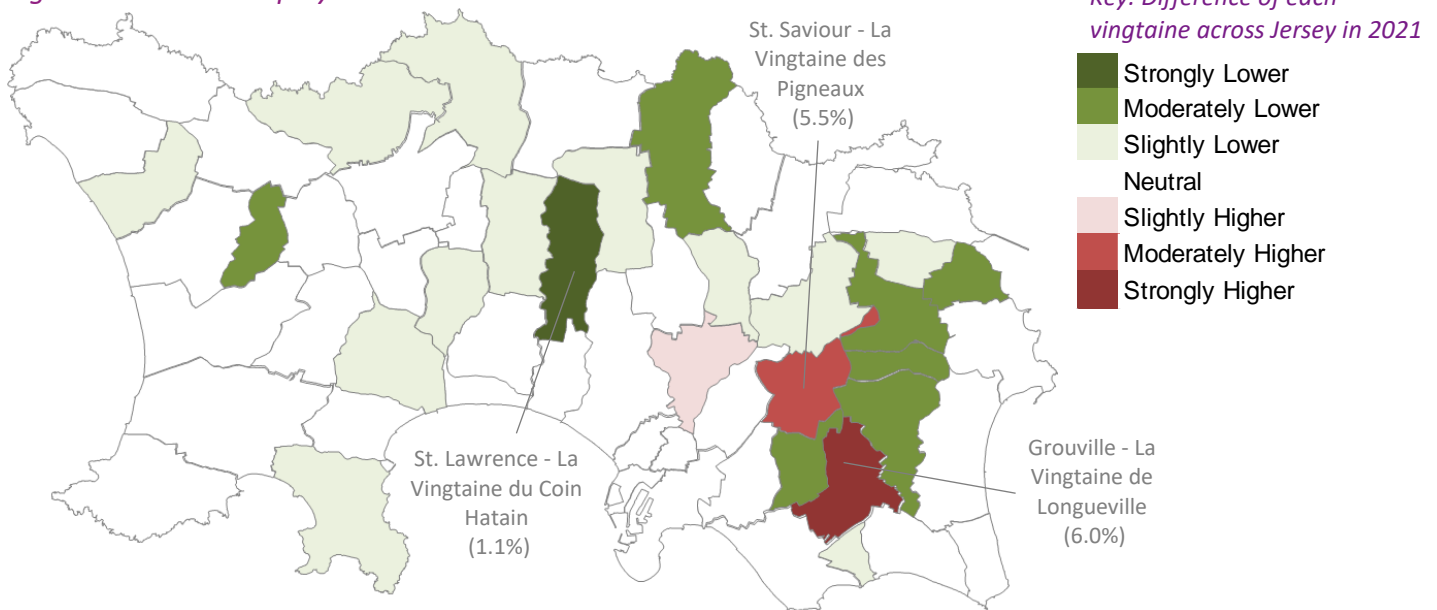
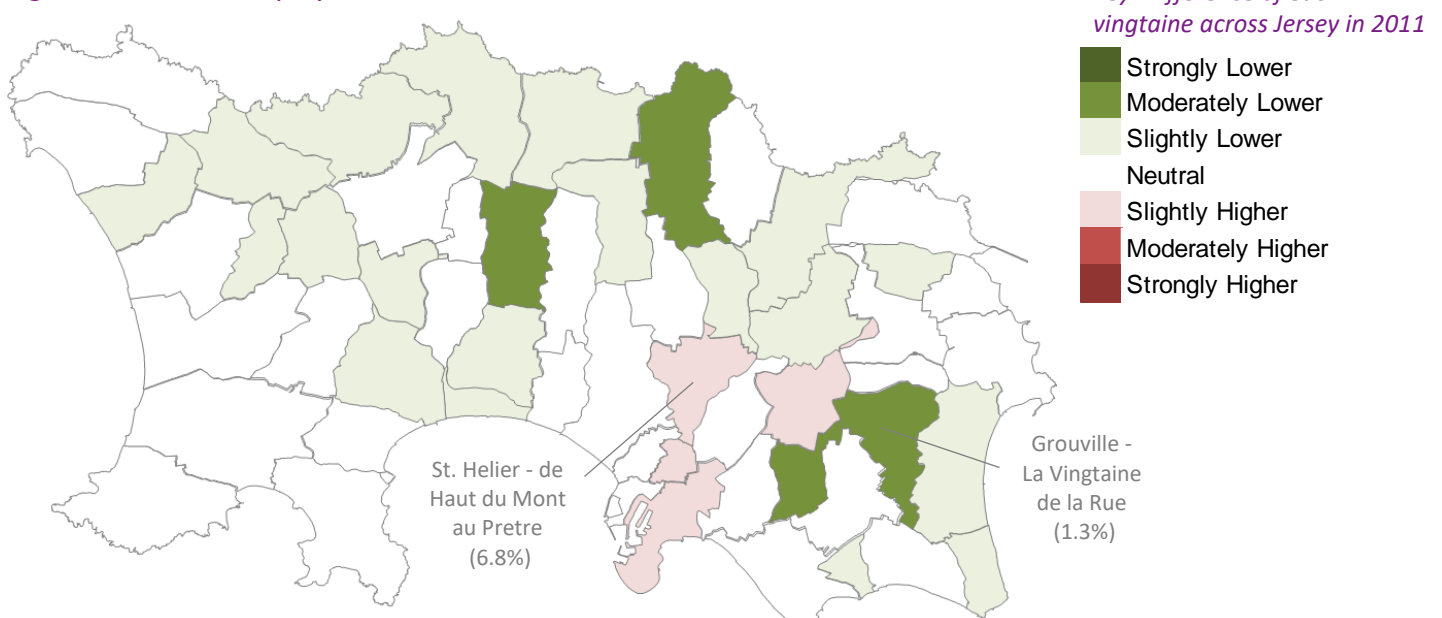


Figure 8: 2011 Unemployment



No Car

- In 2021, across the whole of Jersey, around one in ten (10.5%) people lived in a household with no car.
- This varied by vingtaine, from a small percentage (0.6%) of people in La Vingtaine du Coin Tourgis Sud in St. Lawrence, to around one in three (36.5%) people living in Canton de Bas de la Vingtaine de la Ville, St. Helier (see Figure 9).
- No vingtaines had a moderately or strongly lower proportion of people in households with no car in 2021, than seen across the rest of Jersey vingtaines. Two vingtaines in St. Helier, Canton de Bas de la Vingtaine de la Ville (36.5%) and La Vingtaine de Bas du Mont au Pretre (33.8%) had a moderately higher proportion.
- Across all of Jersey, the proportion of people in households with no car in 2021 (10.5%) was lower than a decade previously (10.9%).

Figure 9: 2021 Individuals in households with no car

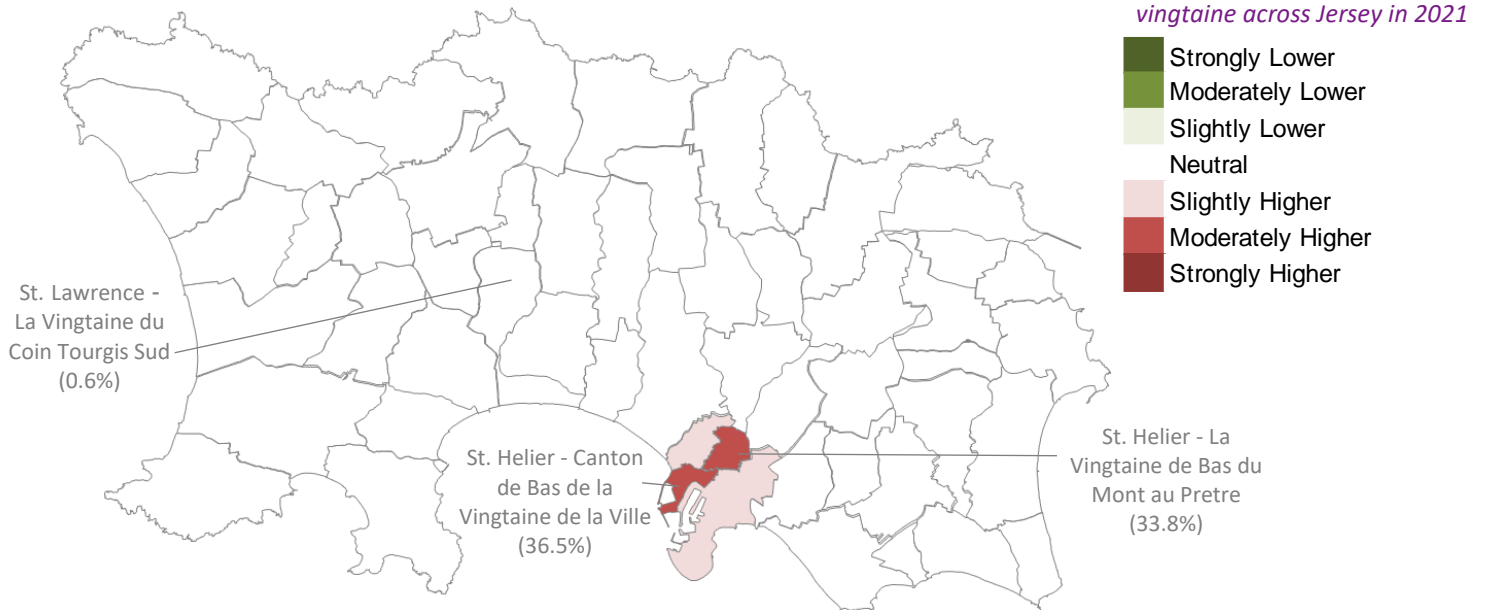
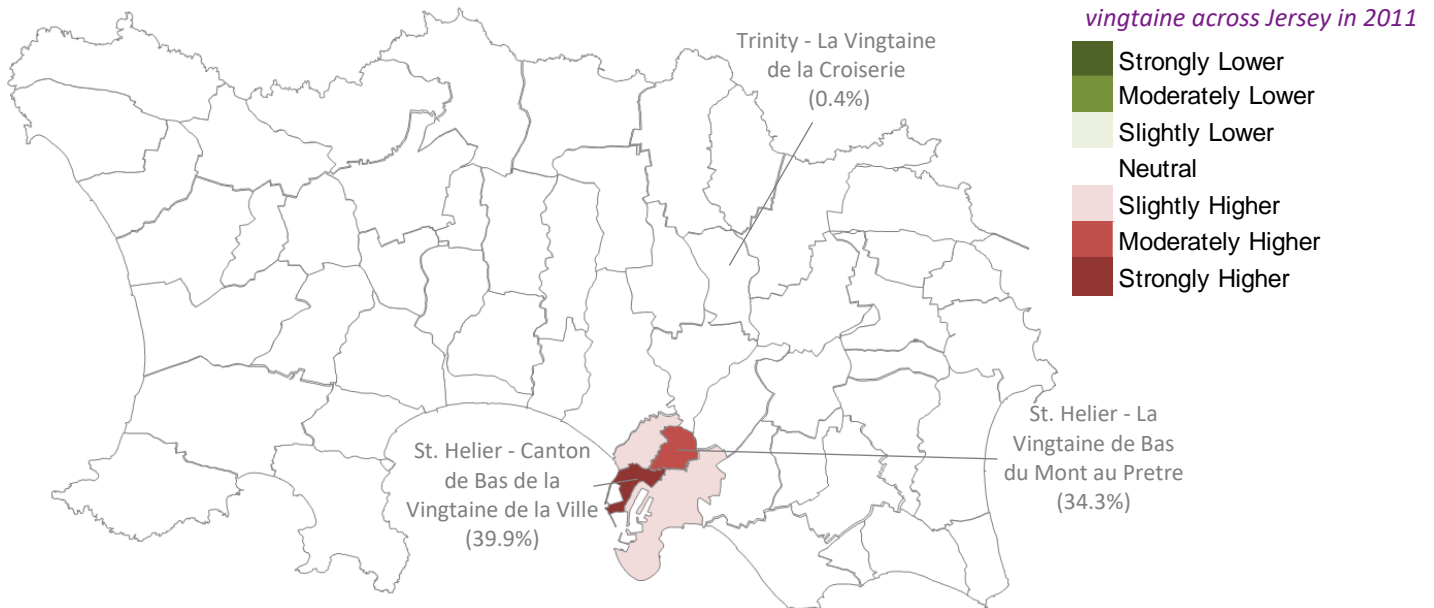


Figure 10: 2011 Individuals in households with no car



Routine and Manual Occupations

- In 2021, across the whole of Jersey, around one in three (28.6%) individuals in private households where the head of household¹⁰ was economically active, had a head of household in a routine or manual occupation.
- This varied by vingtaine, from one in ten (10.7%) individuals in La Vingtaine de la Croiserie in Trinity, to one in two (45.3%) individuals living in La Vingtaine de Bas du Mont au Pretre, St. Helier (see Figure 11).
- La Vingtaine de la Croiserie in Trinity (10.7%) had a moderately lower proportion of individuals with head of household in a routine or manual occupation than other proportions seen across the rest of Jersey vingtaines in 2021. No vingtaines had a moderately or strongly higher proportion.
- The proportion of individuals in private households where the head of household was in a routine or manual occupation in 2021 (28.6%) was lower than a decade previously (32.0%).

Figure 11: 2021 Routine and Manual Occupations

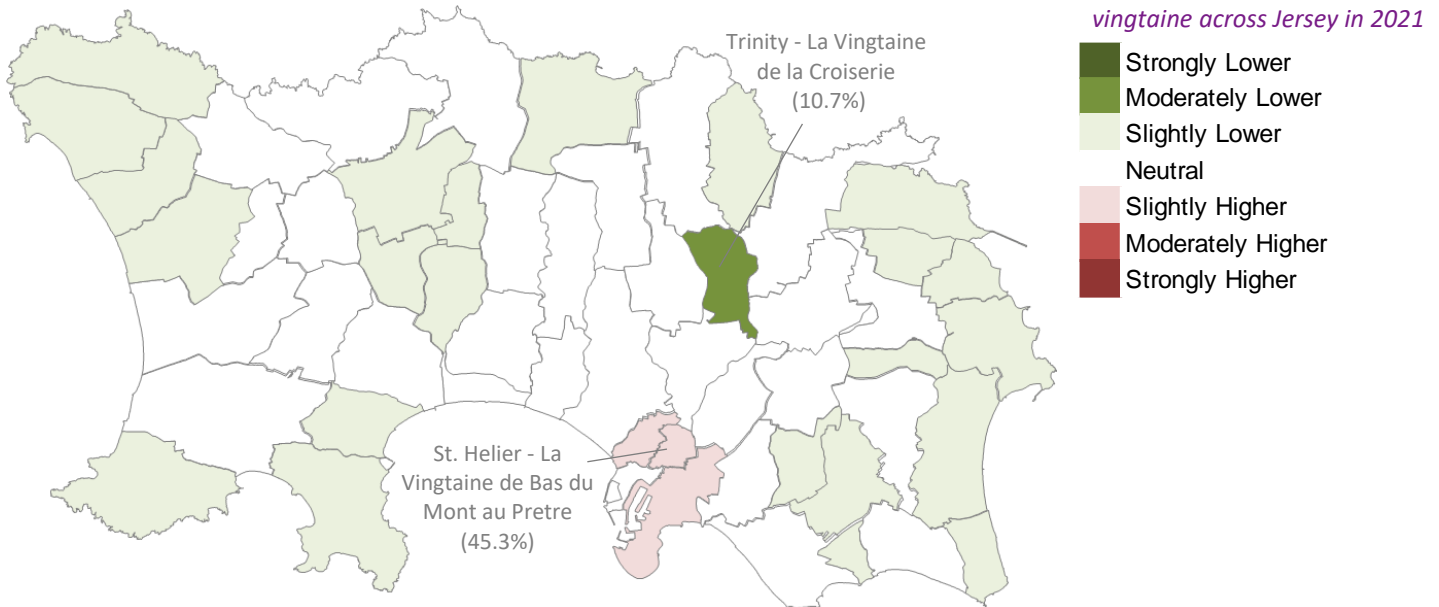
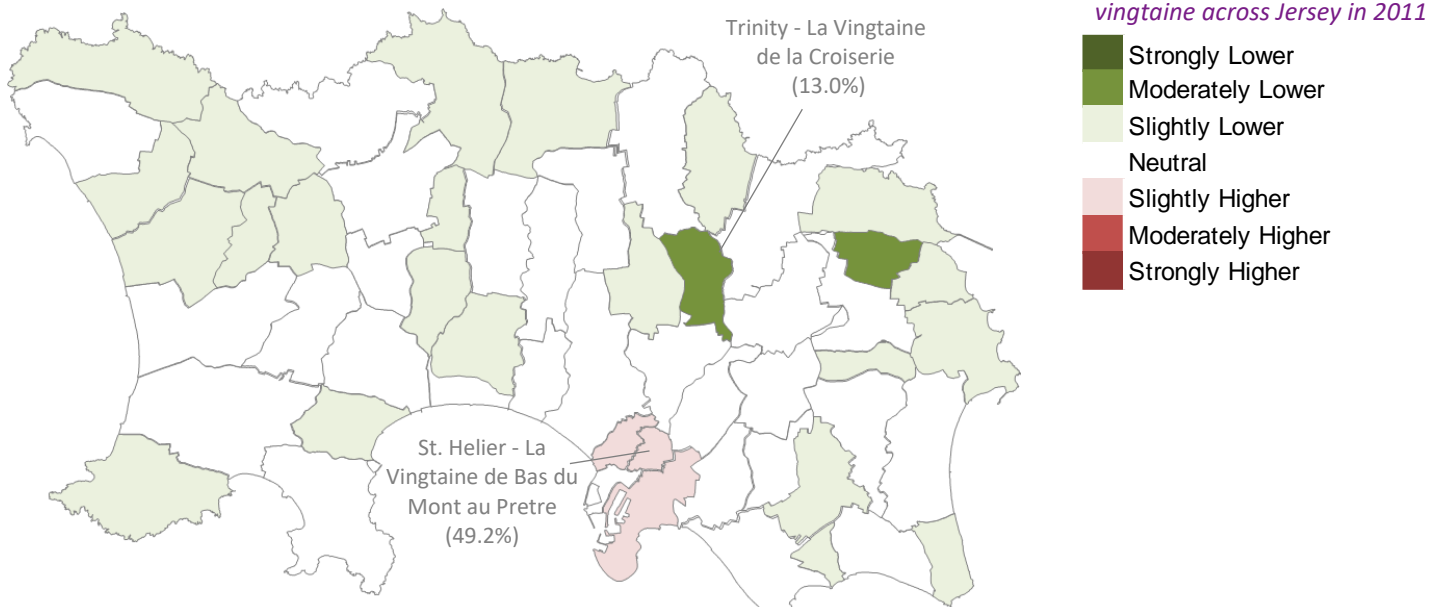


Figure 12: 2011 Routine and Manual Occupations



¹⁰ The head of a household was selected as the household member who works full-time; if no-one then the member who works part-time; if there were more than one to select from in the relevant category, the eldest was selected as household head.

Non Owner-Occupied Households

- In 2021, across the whole of Jersey, around half (46.6%) of households were not owner-occupier households.
- This varied across vingtaines, from around one in seven (15.0%) households in La Vingtaine de l'Eglise in St. Martin, to three in four (76.3%) households in Canton de Bas de la Vingtaine de la Ville, St. Helier (see Figure 13).
- La Vingtaine de l'Eglise in St. Martin (15.0%) had a moderately lower proportion of non owner-occupied households than seen across all Jersey vingtaines in 2021 (i.e. a higher proportion of home ownership).
- The proportion of non owner-occupied households in 2021 (46.6%) increased since a decade previously (45.7%). In other words, home ownership decreased over the decade.
- In 2011, no vingtaines had a moderately or strongly different proportion of non owner-occupied households than other proportions seen across Jersey vingtaines (see Figure 14).

Figure 13: 2021 Non Owner-Occupied

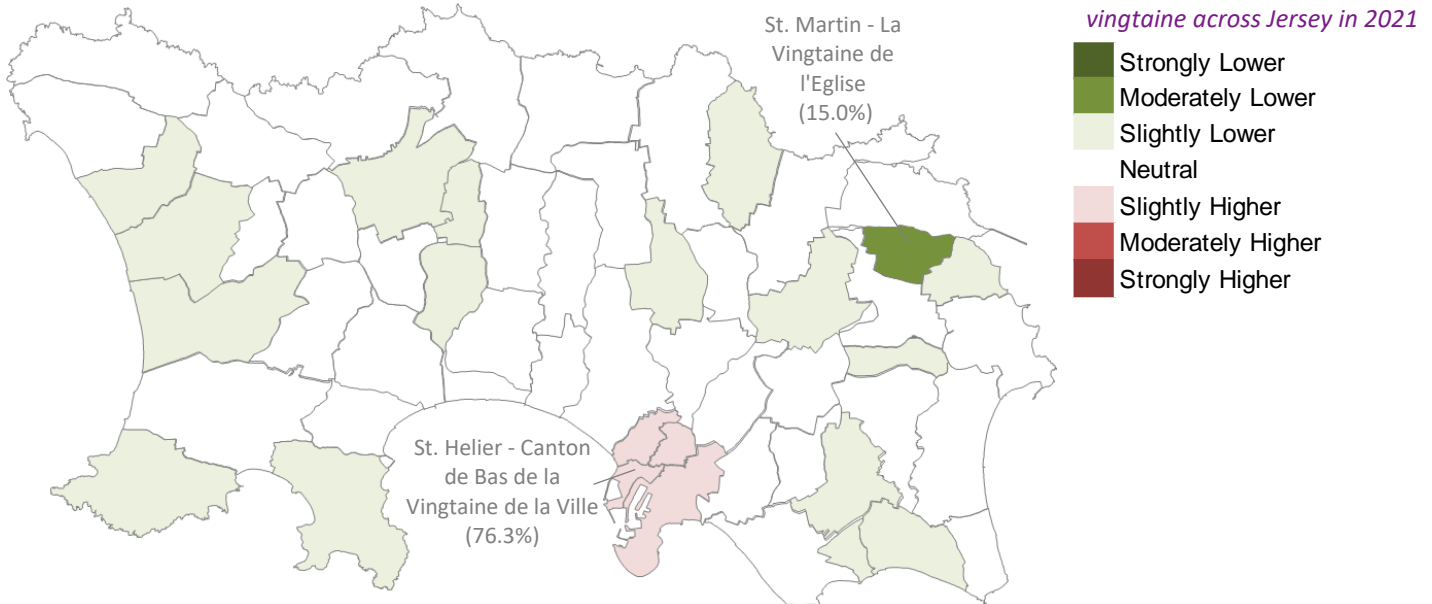
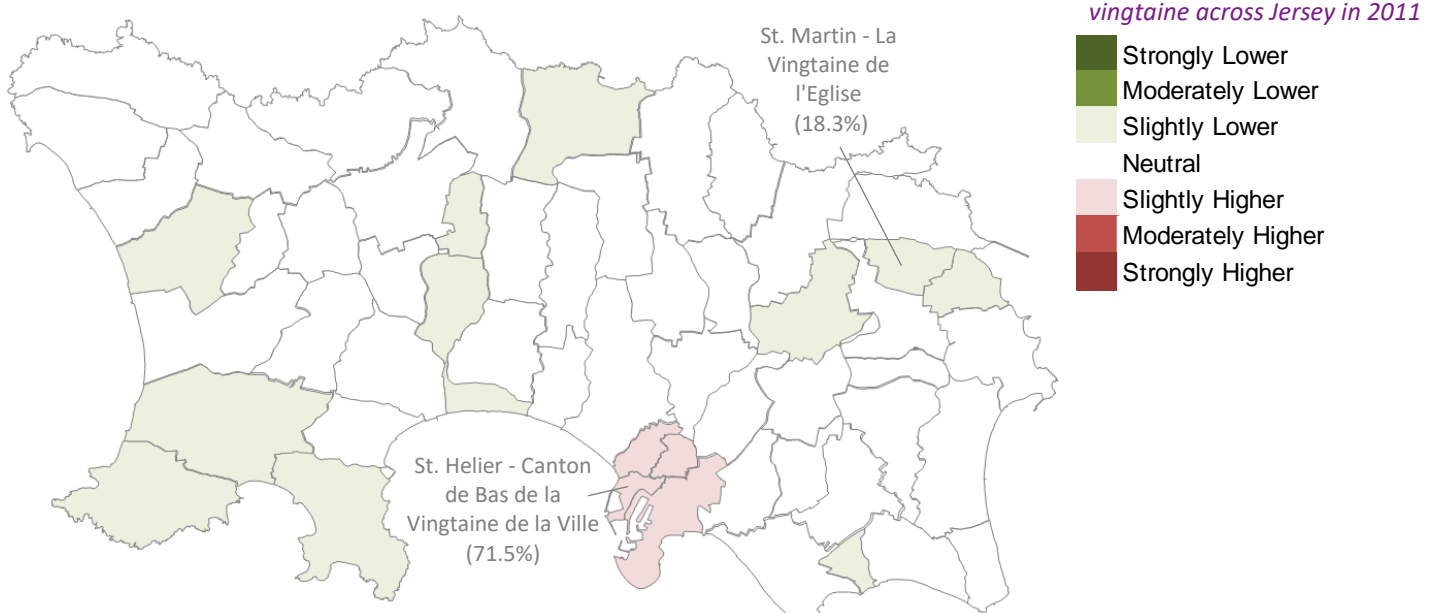


Figure 14: 2011 Non Owner-Occupied



No Educational Qualifications

- In 2021, across the whole of Jersey, around one in seven (15.6%) people aged 16-64 years had no formal educational qualifications.
- This varied by vingtaine, from around one in twenty (6.3%) people living in La Vingtaine de l'Eglise in St. Martin, to one in four (25.5%) people in La Vingtaine de Bas du Mont au Pretre, St. Helier (see Figure 15).
- There were no vingtaines in 2021 that had a moderately or strongly different proportion of people with no educational qualifications across all vingtaines.
- The proportion of Islanders aged 16-64 years with no educational qualifications in 2021 (15.6%) decreased since 2011 (22.4%).

Figure 15: 2021 No Educational Qualifications

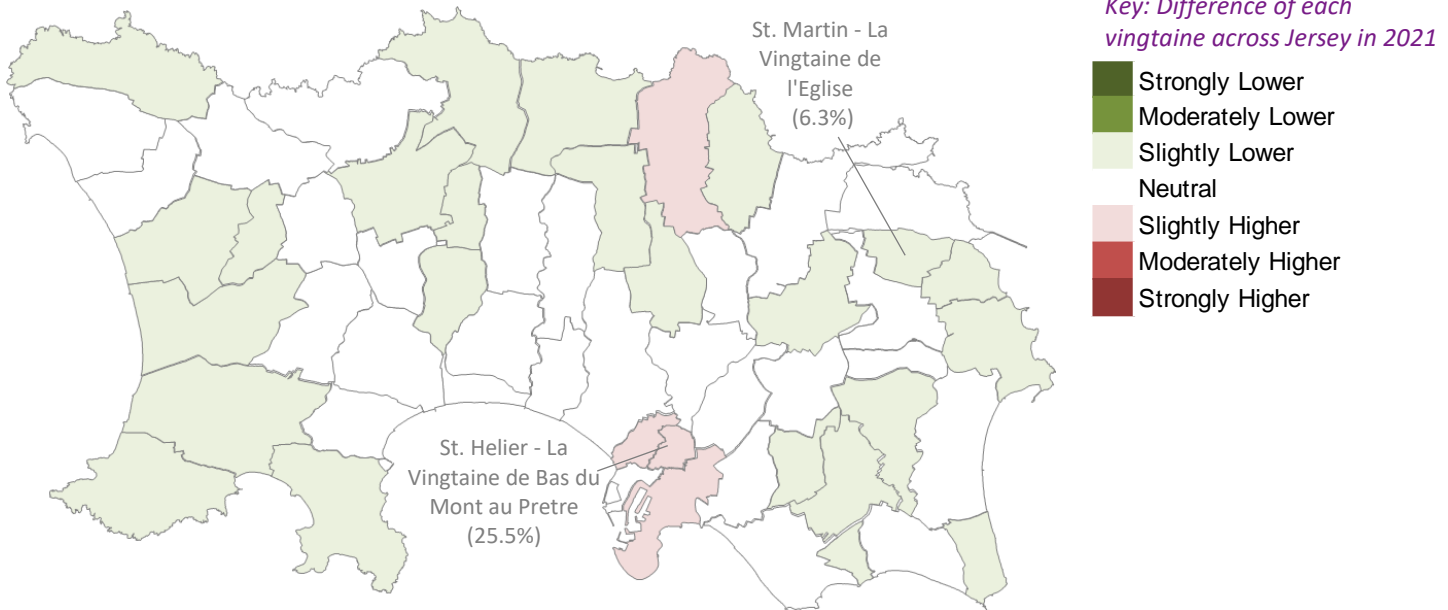
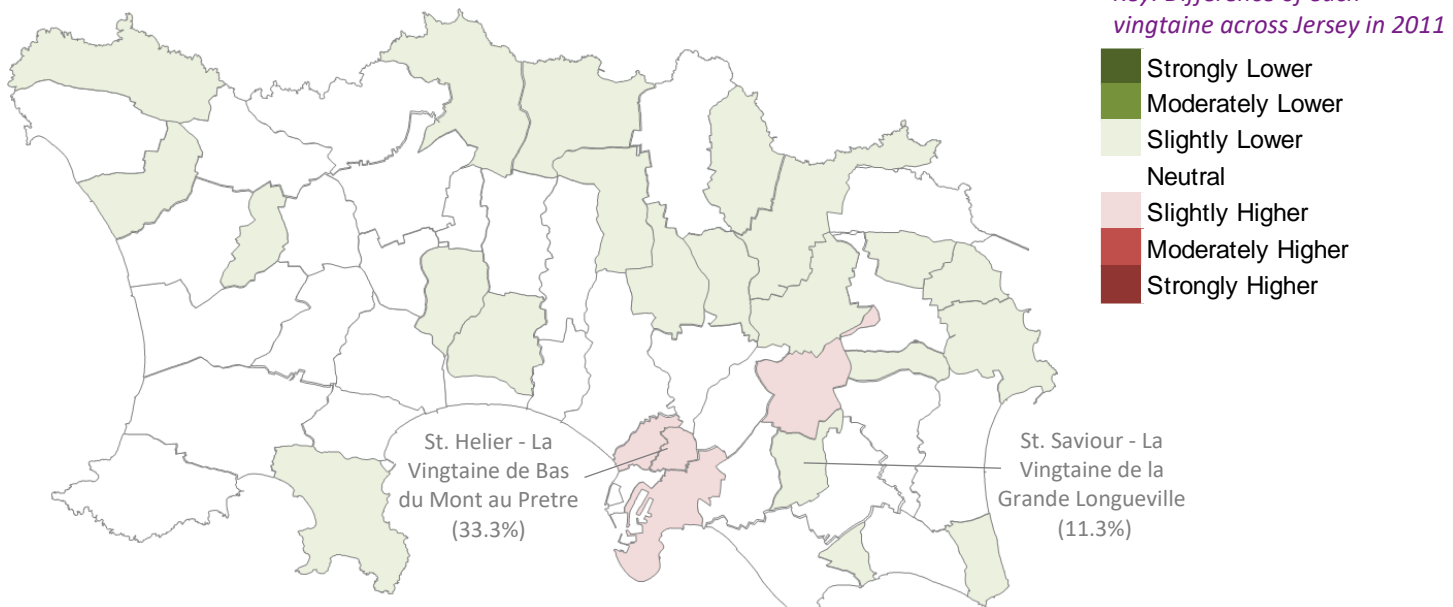


Figure 16: 2011 No Educational Qualifications



Pensioners

- In 2021, across the whole of Jersey, around one in six (18.1%) people were pensioners aged 65 or over.
- This varied by vingtaine, from around one in ten (11.0%) people living in Canton de Bas de la Vingtaine de la Ville in St. Helier, to one in three (30.9%) people in La Vingtaine du Douet, St. Peter (see Figure 17).
- There were no vingtaines in 2021 with a moderately or strongly lower proportion of pensioners compared with other Jersey vingtaines. However, La Vingtaine du Douet in St. Peter (30.9%) had a strongly higher proportion, and La Vingtaine de Noirmont in St. Brelade (27.5%) had a moderately higher proportion of pensioners.
- The proportion of pensioners in Jersey in 2021 (18.1%) increased since a decade previously (14.8%). The proportion of pensioners in La Vingtaine du Douet in St. Peter and La Vingtaine de Noirmont in St. Brelade increased notably between 2011 and 2021.

Figure 17: 2021 Pensioners

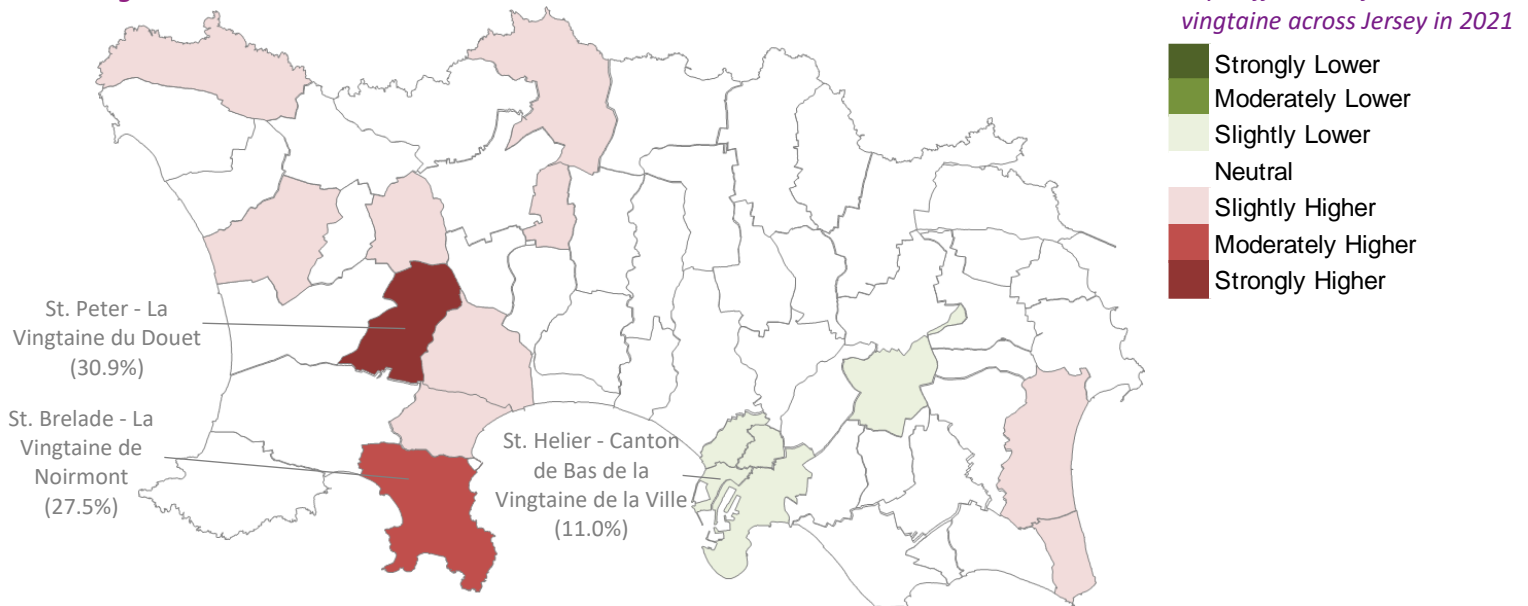
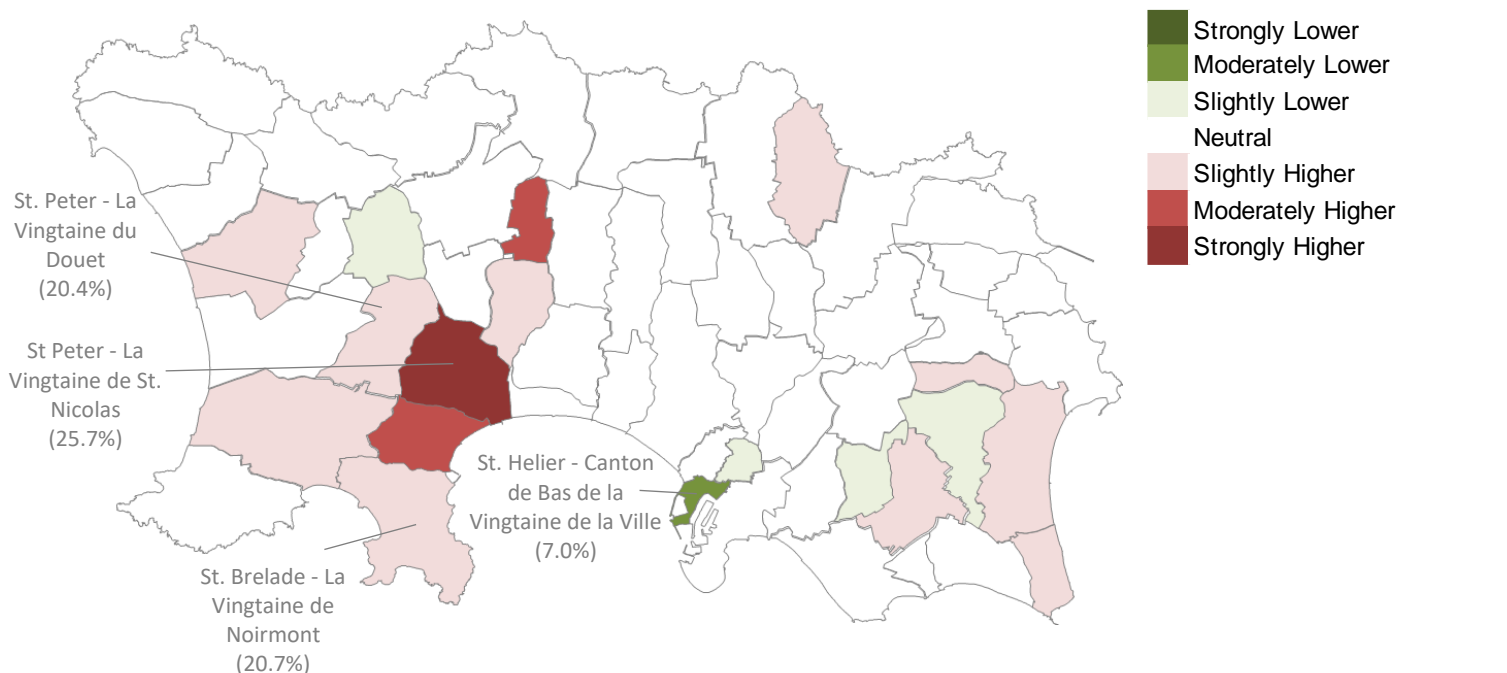


Figure 18: 2011 Pensioners



Children Under Five

- In 2021, across the whole of Jersey, around one in four (28.3%) children aged under sixteen were under five.
- The proportion of pre-school aged children, relative to all children under 16, varied across vingtaines, from around one in seven children (15.0%) living in La Petite Cueillette in St. Ouen, to nearly half (44.5%) in Canton de Bas de la Vingtaine de la Ville, St. Helier (see Figure 19).
- Two vingtaines had a strongly lower proportion, and one vingtaine had a moderately lower proportion of children who were under five, when compared to all Jersey vingtaines in 2021. The two vingtaines of Canton de Bas de la Vingtaine de la Ville in St. Helier (44.5%) and La Rocquier in St. Clement (42.0%) had a strongly higher proportion.
- The proportion of children who were under five in 2021 (28.3%) decreased compared to ten years prior (29.0%). The proportion of all children who were under five in the St. Helier vingtaine Canton de bas de la Ville did not change notably between 2011 and 2021, however the vingtaine La Rocquier in St. Clement did increase notably over the same time period.
- In 2011, two vingtaines had a moderately lower proportion of children who were under five when compared to all Jersey vingtaines. Two vingtaines in St. Helier had a moderately or strongly higher proportion (see Figure 20).

Figure 19: 2021 Children Under 5

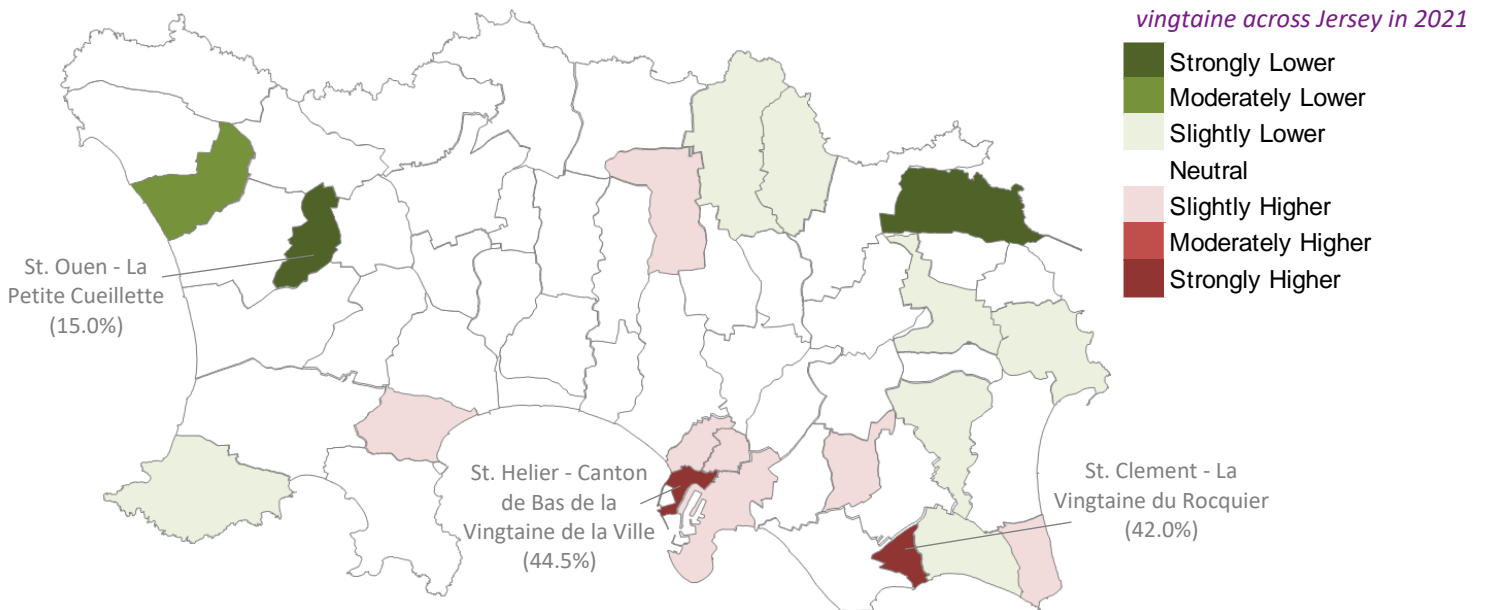
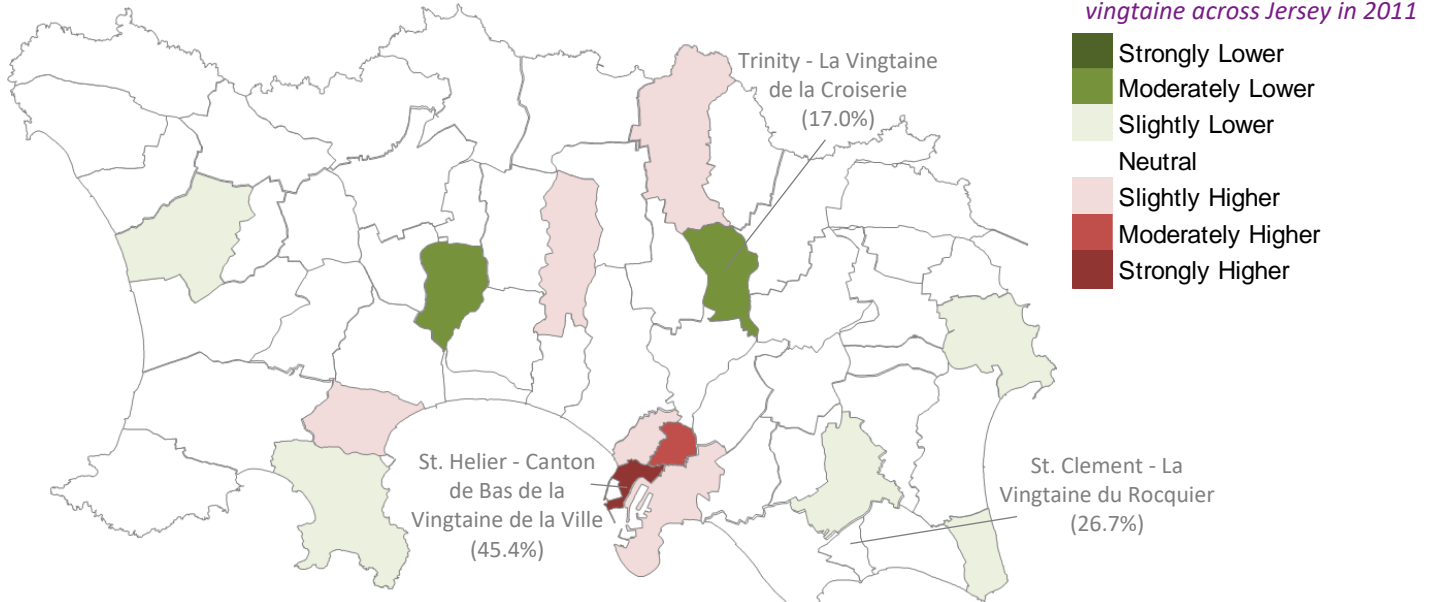


Figure 20: 2011 Children Under 5



Single Parent Households

- In 2021, across the whole of Jersey, around one in twelve (8.3%) private households were single parent households.
- This varied across vintaines, from around one in fifty (2.3%) households in La Vingtaine du Fief de la Reine in St. Martin, to one in seven (14.5%) households in La Vingtaine des Pigneaux, St. Saviour (see Figure 21).
- There were three vintaines in 2021 that had a moderately lower proportion and one vingtaine that had a strongly lower proportion of single parent households, than across all Jersey vintaines. La Vingtaine des Pigneaux in St. Saviour (14.5%) had a strongly higher proportion.
- The proportion of single parent households in 2021 (8.3%) increased from ten years prior (7.9%).
- A decade earlier, La Vingtaine de Haut du Mont au Pretre in St. Helier (14.1%) had a moderately higher proportion of single parent households (see Figure 22).

Figure 21: 2021 Single parent households

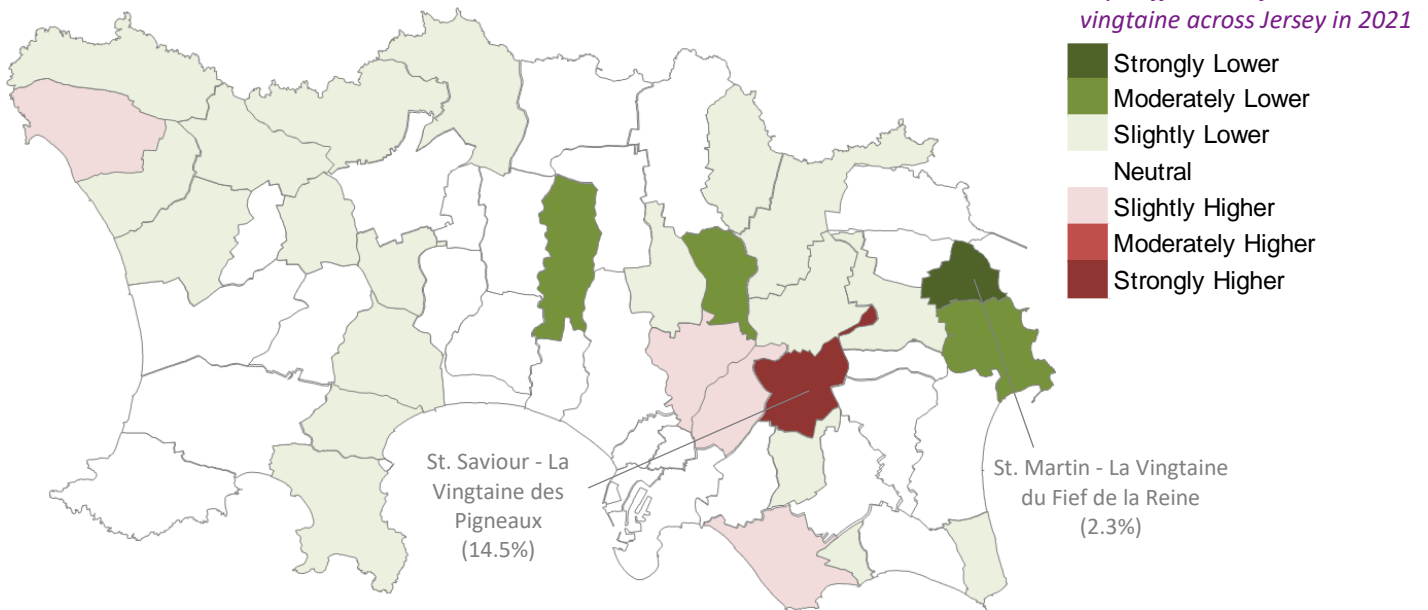
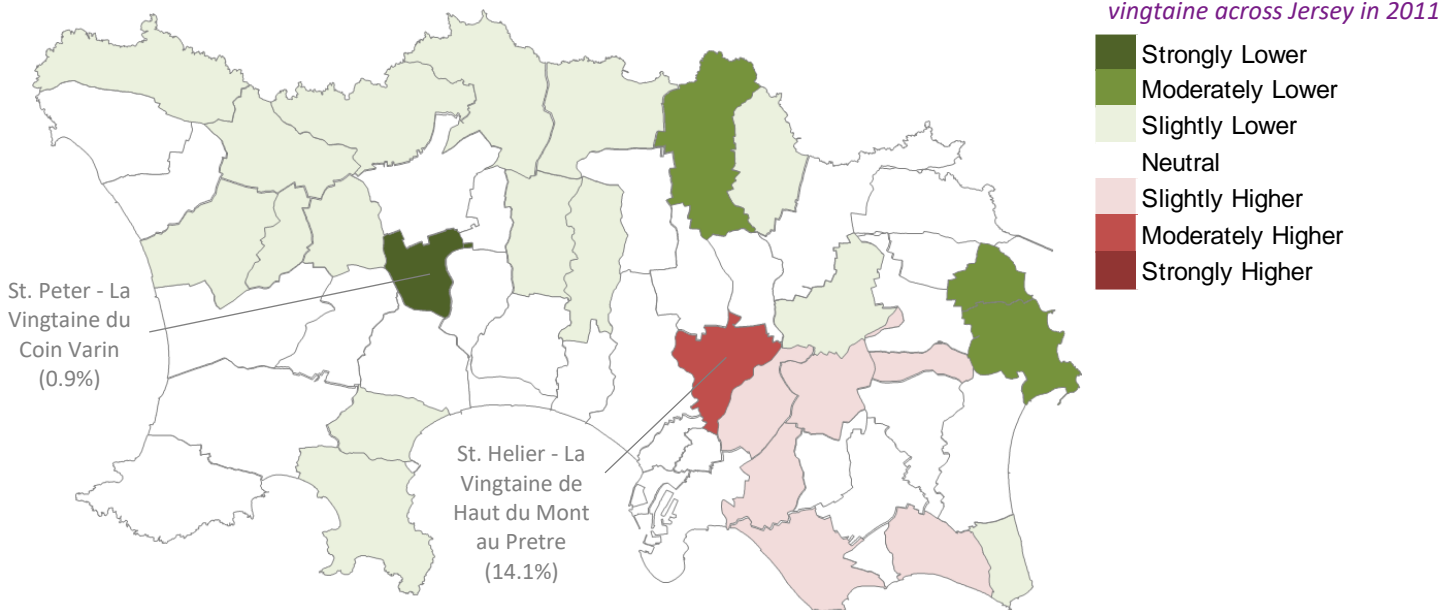


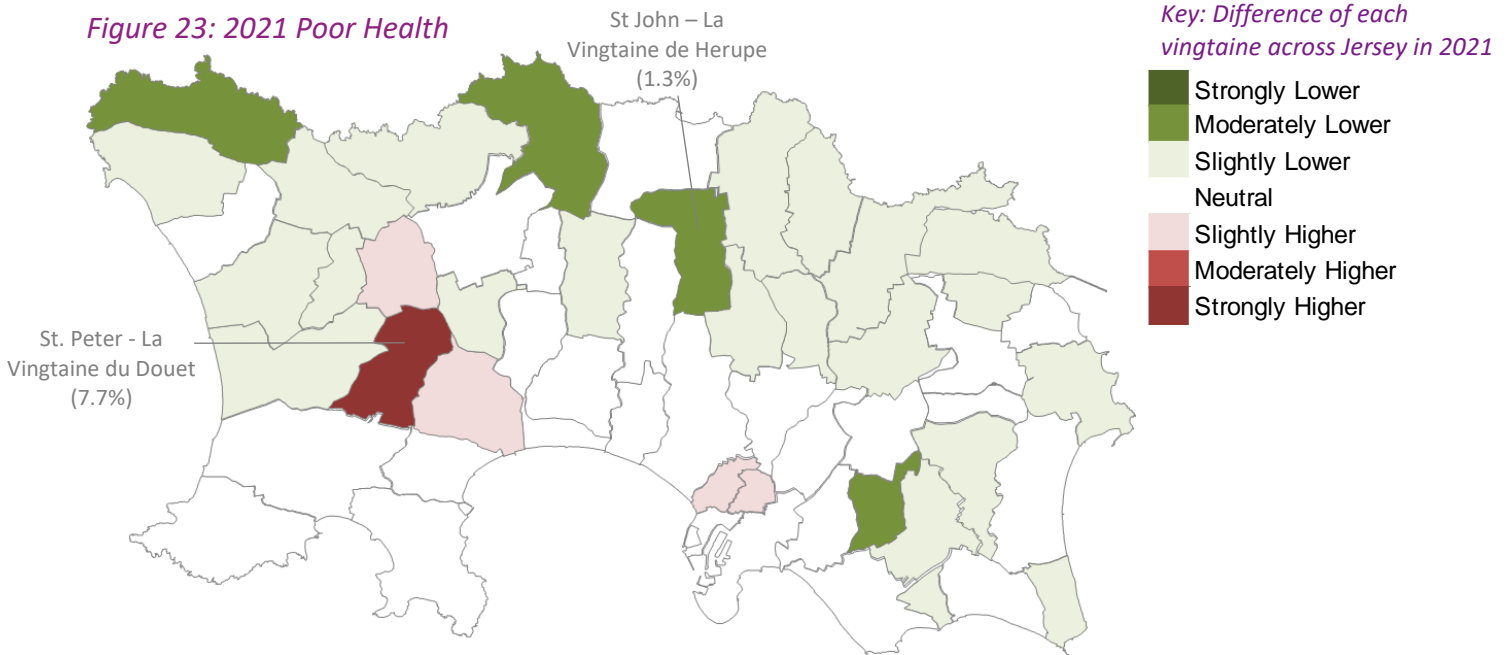
Figure 22: 2011 Single parent households



Self-Reported Health Status

- Data for 2011 is not available, as the question ‘How is your health in general’ was not included in the 2011 census.
- In 2021, across the whole of Jersey, around one in twenty-five (4.1%) people self-reported having poor or very poor health.
- This proportion varied across vingtaines, from around one in a hundred (1.3%) people living in La Vingtaine de Herupe in St. John, to one in thirteen (7.7%) people in La Vingtaine du Douet, St. Peter.
- Four vingtaines had moderately lower proportions of people with poor health than the proportions seen across all Jersey vingtaines. La Vingtaine du Douet in St. Peter had a strongly higher proportion of people with poorer health.

Figure 23: 2021 Poor Health



Notes

This analysis has been produced by a Statistics Jersey project team funded by the Covid Recovery Fund. The Covid Recovery Insights Project team are using administrative datasets from across the Government of Jersey to produce insights on which socio-demographic groups were more affected by the covid pandemic, and therefore how best to support our community to recover from the pandemic.

This initial work, using Census 2011 and 2021 data, provides context and knowledge which will feed into the wider project. Further outputs will be produced from the project team through 2023.

The 2021 Census was run during the Covid-19 pandemic; as such, a number of restrictions were in place. See www.gov.je/census for further information on the operations, methodology, and reports of the census. Each census bulletin, and the full report, include notes on quality assurance and methodology¹¹.

Deprivation index methodology notes

This methodology uses the comprehensive, household and person level data obtained through censuses, and combines multiple factors which are associated with deprivation using a standardising methodology – thereby providing a means of exploring relative potential deprivation between different geographical regions of Jersey.

The combined index is based on assumptions about which variables best represent material deprivation which may or may not hold for some areas – for example not having a car in town may not necessarily represent material deprivation, whereas not having a car in a rural area may do. There are some indicators associated with material deprivation which weren't included in the index, as the data was not part of the 2011 or 2021 census dataset, for example it doesn't include household income data.

It is worth noting that geographical regions are not homogenous – each vingtaine will be made up of a mix of households, some deprived, some not, and some in between, and the combined score only gives an *indication* of the likelihood of deprivation of households in general within the geographical area. A high deprivation index is not suggesting that every household within an area *is* materially deprived, but that it is more likely to be relative to vingtaines with a lower index. The outputs of the analyses could vary according to relatively small changes in composition of a vingtaine – for example a new development of homes in an area could result in fluctuations in one or more of the component indicators, and result in slight changes in a vingtaine's ranking.

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¹¹ In addition to data quality notes included in the census bulletins, the following was noted during this analysis. At the time of the census in 2011, households were assigned to their vingtaine based on the address co-ordinates held in the Jersey Land and Property Index (JLPI). The JLPI is an administrative data system which is continually being updated as new addresses are established, and as new information is discovered for existing records.

For a small number of households (approximately 100 on various vingtaine borders), slight improvements in the accuracy of their mapping co-ordinates over the ten-year period would move them into a neighbouring vingtaine, if they were to be assigned to vingtaines based on the current co-ordinates held in the JLPI. Sensitivity analyses were carried out to explore the impact of this movement of a small number of households on the 2011 outputs. The impact was shown to be minimal, and therefore to maintain consistency of outputs with historic 2011 data, the small number of households affected were not reassigned for this analysis.

Methodology

The proportion of households or people within a vingtaine for which each indicator is true was calculated. These proportions were then standardised into a 'Z score', to allow for comparison of vingtaines across Jersey. The Z score indicates whether a vingtaine proportion for a component indicator is higher/worse (red), or lower/better (green), than the proportions seen across all Jersey vingtaines.

Where

- x is the number of observed values
- n is the total in the vingtaine¹²
- N is the total across the Island¹²

First the proportion is calculated for each vingtaine

$$\hat{p} = \frac{x}{n}$$

The population-weighted mean of vingtaine proportions (which is equivalent to the total population proportion) is calculated

$$p = \sum \hat{p} \frac{n}{N} = \frac{\sum x}{N}$$

We can then calculate a population-weighted standard deviation of vingtaine proportions

$$\sigma = \sqrt{\sum (\hat{p} - p)^2 \frac{n}{N}}$$

We can then calculate a Z score for each vingtaine

$$Z = \frac{\hat{p} - p}{\sigma}$$

Z scores can then be used to compare vingtaine proportions across the Island and draw conclusions about deviations from the average; a positive score indicates a proportion is higher than across all Jersey vingtaines, a negative score indicates a proportion is lower than across all Jersey vingtaines. The Z score is used here as a way of measuring extent of deviation from the total population proportion, and not for further testing of *statistical* significance, as not all components' Z scores follow a standard normal distribution.

For the combined indices, standardised scores are then added together to view as a single index of deprivation. Table 3 provides the thresholds used in this report.

Table 3: Thresholds

Key							
Relative difference to other vingtaines	Strongly Lower	Moderately Lower	Slightly Lower	Neutral	Slightly Higher	Moderately Higher	Strongly Higher
Z Score	-2.58 or less	-1.96 to -2.57	-1.01 to -1.95	-1.0 - 1.0	1.01 to 1.95	1.96 to 2.57	2.58+
Combined Index	-11.61 or less	-8.82 to -11.60	-4.51 to -8.81	-4.5 to 4.5	4.51 to 8.81	8.82 to 11.60	11.61+
Combined Index (Exc. Pensioners)	-10.32 or less	-7.84 to -10.31	-4.01 to -7.83	-4 to 4	4.01 to 7.83	7.84 to 10.31	10.32+

¹² Number of individuals or households with any specified criteria, see Table 1 for details