Western Cape Government
Human Settlements

Municipal Human Settlement Demand Profile

Beaufort West Local Municipality

2015

As at 5 June 2015

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Introduction

This municipal human settlement demand profile has been generated by the Western Cape Department of Human Settlements for human settlement planning purposes. A range of data sources have been used, but the profile is based heavily on Census 2011 data. Data sources are provided below each graph or table. Where data has been manipulated, a methodology is provided in the end notes to this profile. The profile has been generated automatically using an online database with additional analysis added. Users will be able to update the data or view multiple representations of the data online. Separate Data Scoping and Housing Market Segment Reports were also prepared as informants to the demand profile and are referred to throughout the report.

The profile is presented according to the three components of human settlements: Housing, Networked Infrastructure and Social Infrastructure, followed by Trends, Analysis and Discussion.

Definitions

Term	Definition
Adequate housing:	All Census 2011 dwelling types excluding informal dwellings and informal backyard shacks. Includes traditional dwellings and formal backyard structures.
Dwelling type:	Census 2011 dwelling types, with the following three categories aggregated: Cluster/Townhouse/Semi-detached house (includes: Cluster house in complex; Townhouse (semi-detached house in a complex); and Semi-detached house); House/flat/room on other property (includes: House/flat/room in backyard; and Room/flatlet on a property or larger dwelling/servants quarters/granny flat); and Other (includes: Caravan/tent; and Other).
Housing status:	A re-categorisation of Census 2011 dwelling types, isolating those considered inadequate (informal dwelling and informal backyard dwelling) and adding a calculated figure for overcrowding. All other housing types in Census 2011 are considered adequate.
Inadequate housing:	Census 2011 figures for informal dwellings, informal backyard shacks and a calculated figure for overcrowding.
Income:	Household monthly income in 2011, modified from Census 2011 as described in end note 1.
Informal dwelling:	Census 2011 dwelling type: "Informal dwelling (shack; not in backyard; e.g. in an informal/squatter settlement or on a farm)", defined in the Census metadata as "Makeshift structure not approved by a local authority and not intended as a permanent dwelling. Typically built with found materials (corrugated iron, cardboard, plastic, etc.). Contrasted with formal dwelling and traditional dwelling.".
Informal backyard shack:	Census 2011 dwelling type: "Informal dwelling (shack; in backyard)".

Term	Definition
Informal settlement:	All households (in any dwelling type) in Census 2011 settlement category: "Informal residential area".
Overcrowding:	A calculated figure based on an assumption of more than two people per room (as measured in the 2011 Census) resulting in overcrowding, and requiring an additional room for every two people. The number of overcrowded households is calculated using the assumption of one household and two rooms in every new dwelling. See end note 2 for a full explanation of the methodology.
Rural:	Census 2011 settlement categories: "Farms", Small holdings" and "Traditional residential".
Urban:	All Census 2011 settlement types excluding those included in the definition of Rural (above).

Housing

Dwelling type vs income profile

A description of the methodology used to re-categorise households using the Census 2011 monthly income brackets is provided in end note 1.

Figure 1: Proportion of households in each dwelling type by monthly household income bracket

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Informal dwelling	15	19	27	3	1	0	0	0	0	65
Informal backyard shack	20	24	33	11	1	1	2	2	1	95
Overcrowding	69	96	189	107	17	7	2	3	2	492
Other	17	8	24	11	6	3	2	2	2	73
Traditional dwelling	7	14	12	7	1	1	0	1	1	44
House/flat/room on other property	74	55	80	60	19	8	4	5	4	310
Flat or apartment in a block of flats	21	9	28	31	19	9	6	8	3	133
Cluster house/Townhouse/Semi-detached house	169	236	374	212	33	19	18	23	22	1 105
House or brick/concrete block structure on a separate stand or yard or on a farm	2 108	2 023	3 192	1 690	687	365	318	425	453	11 260
Total	2 500	2 485	3 957	2 132	783	412	352	468	486	13 577

Table 1: Number of households by dwelling type and monthly household income category

(Source: Census 2011)

Beaufort West has an atypical dwelling type distribution across income brackets, with the majority of households in all income brackets housed in formal structures on separate stands, but with very low level of informality. Approximately 66% of the population fall into the R0-R3 500 income bracket and 88% of the population fall into the potentially subsidised R0-R15 000 income bracket. The proportions of Informal dwellings and informal backyard are low throughout the income group. Most inadequate housing is in the form of overcrowding, which increases with income up until the R7 500 income level, after which it sharply decreases.

Registered Housing Demand

From Western Cape Housing Demand Database

This section presents data from the official Housing Demand Database of the Western Cape Department of Human Settlements, which collates the housing demand data of all the non-metro municipalities. The figures presented here represent the 'registered demand', meaning those people that have put their names down on the municipal housing lists. It does not reflect the total demand in the municipality, which would comprise other households not registered on the database.

Total **registered housing demand** as at 2nd April 2015 for Beaufort West Local Municipality was recorded as **5 291**.

Present accommodation

3 264 / 61.7%

262 / 5%

1 720 / 32.5%

Not Specified/Unknown
Backyard
Main house/flat/hostel with the owner/tenant - formal
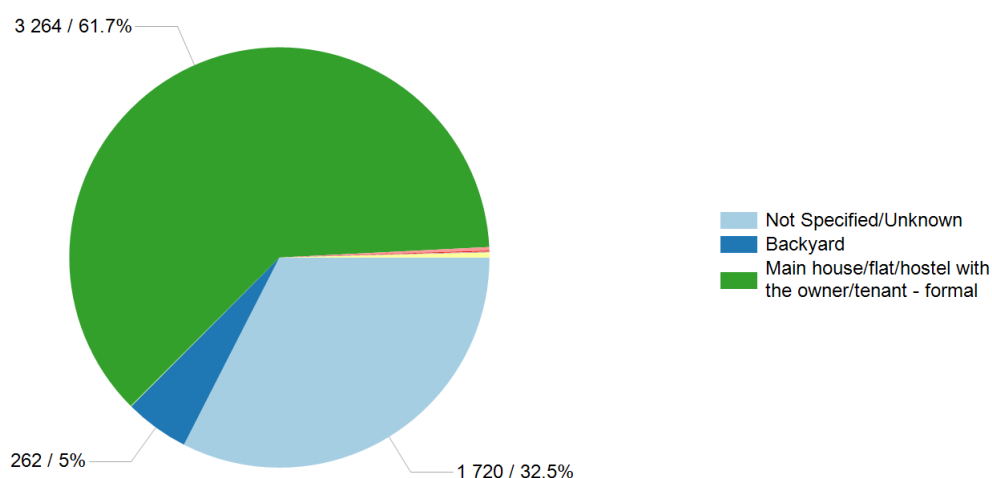
Figure 2: Number and proportion of households on the Housing Demand Database presently in each accommodation type (

Source: Western Cape Housing Demand Database

Choice of assistance

59 / 1.1%

380 / 7.2%

4 832 / 91.3%

A free standing House
Enhanced extended discount benefit Scheme
GAP Housing
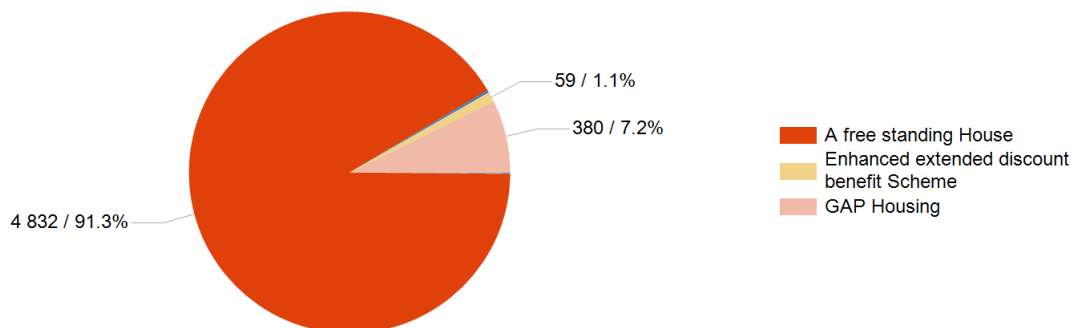
Figure 3: Number and proportion of households on the Housing Demand each assistance option

Source: Western Cape Housing Demand Database

Choice of tenure
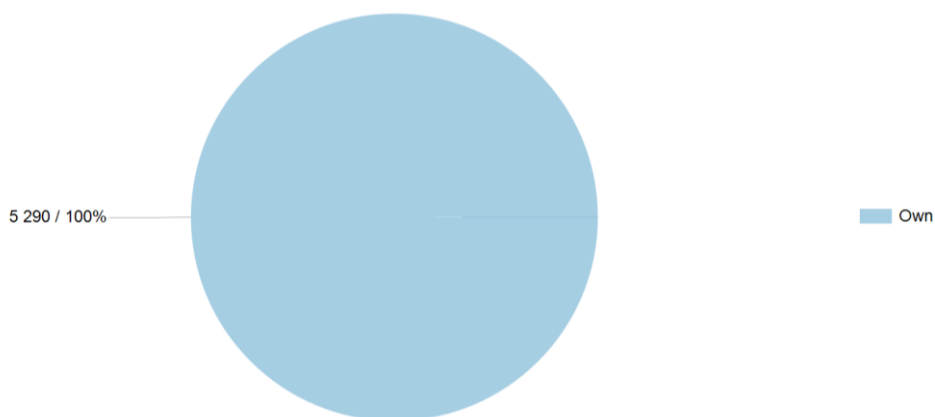
Figure 4: Number and proportion of households on the Housing Demand selecting each tenure option

Source: Western Cape Housing Demand Database

The majority (62%) of individuals registered on the Western Cape Housing Demand Database specified their present accommodation as being in the main house/flat/ hostel with the owner/tenant. The next highest specified present accommodation was in backyards. About 91% of households would prefer a free-standing subsidised house, with most of the remainder seeking GAP Housing (7.2%). Only one household indicated a preference for rental assistance over ownership.

Housing status

Housing status refers to whether the dwelling type is considered 'adequate' or not. Inadequate housing comprises informal dwellings, informal backyard shacks and overcrowded dwellings. See the definitions and endnote 2 for a full explanation of the methodology employed to calculate overcrowding.

The total calculated number of inadequately housed households is **652**.
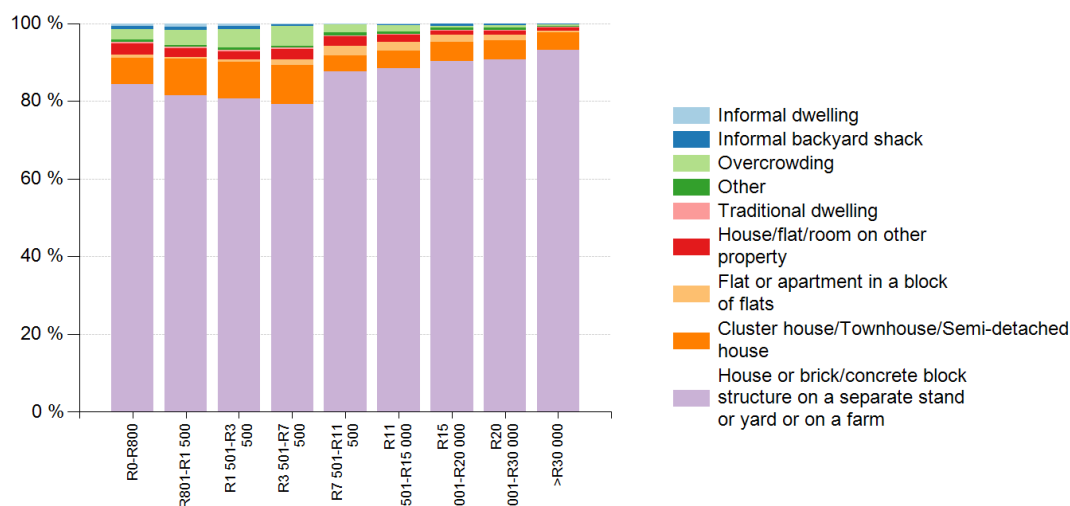
Housing status by income
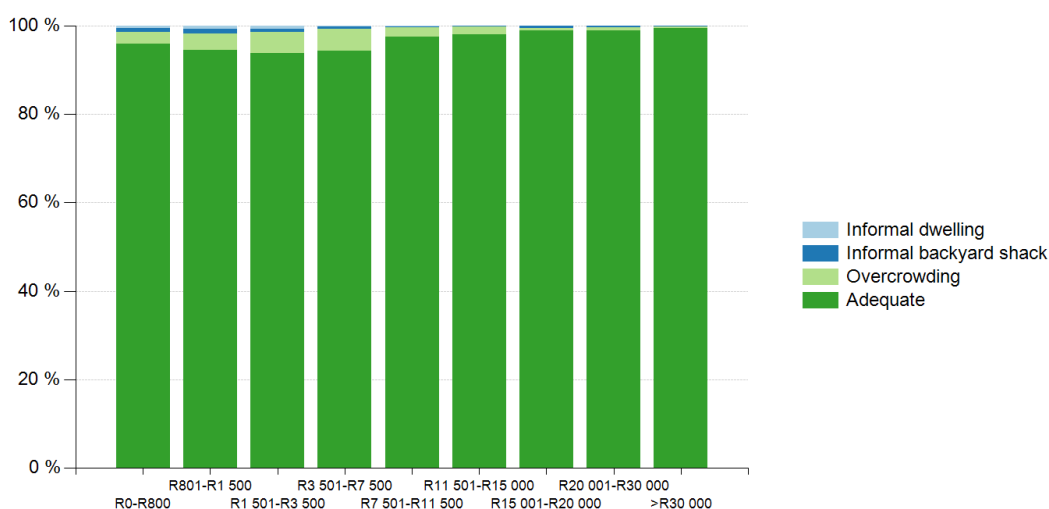
Figure 5: Proportion of households in each housing state by monthly household income bracket

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Informal dwelling	15	19	27	3	1	0	0	0	0	65
Informal backyard shack	20	24	33	11	1	1	2	2	1	95
Overcrowding	69	96	189	107	17	7	2	3	2	492
Adequate	2 396	2 346	3 709	2 010	765	404	348	463	483	12 924
Total	2 500	2 485	3 958	2 131	784	412	352	468	486	13 576

Table 2: Number of households by housing status and monthly household income bracket

(Source: Census 2011)

The total calculated number of inadequately housed households (comprising those in informal dwellings, informal backyards and overcrowded dwellings) is **652**, which represents **5 %** of the total.

The proportion households housed in informal dwellings, informal backyard shacks and overcrowding decreases with increasing income. Inadequate housing is mostly informal dwelling in lower income groups but this proportion decreases with increasing income. The remainder of inadequate housing is evenly distributed between informal backyard shacks and overcrowding but with a bias to overcrowding as income increases. The absolute numbers of inadequately housed households peaks in the R1501-R3 500 income category

and drops off rapidly above R7 500, with only 263 higher income households inadequately housed, this is mainly due to overcrowding.

Housing status by income and age

The figures and tables below present the same data as for Figure 5 and Table 2, but divided into household heads aged below 40 years (Figure 6) and those above 40 years (Figure 7).
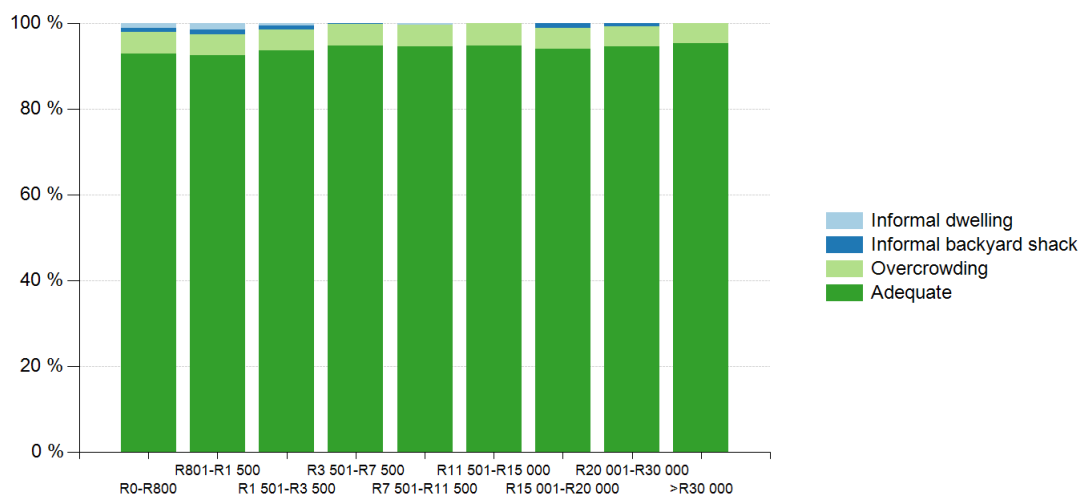
Figure 6: Proportion of household heads below 40 years in each housing state by monthly household income bracket

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Informal dwelling	12	11	7	0	1	0	0	0	0	31
Informal backyard shack	13	8	10	1	0	0	1	1	0	34
Overcrowding	61	37	61	30	14	7	5	6	5	226
Adequate	1 142	701	1 155	576	267	130	96	122	103	4 292
Total	1 228	757	1 233	607	282	137	102	129	108	4 583

Table 3: Number of household heads aged **below** 40 years in each housing state by monthly household income bracket
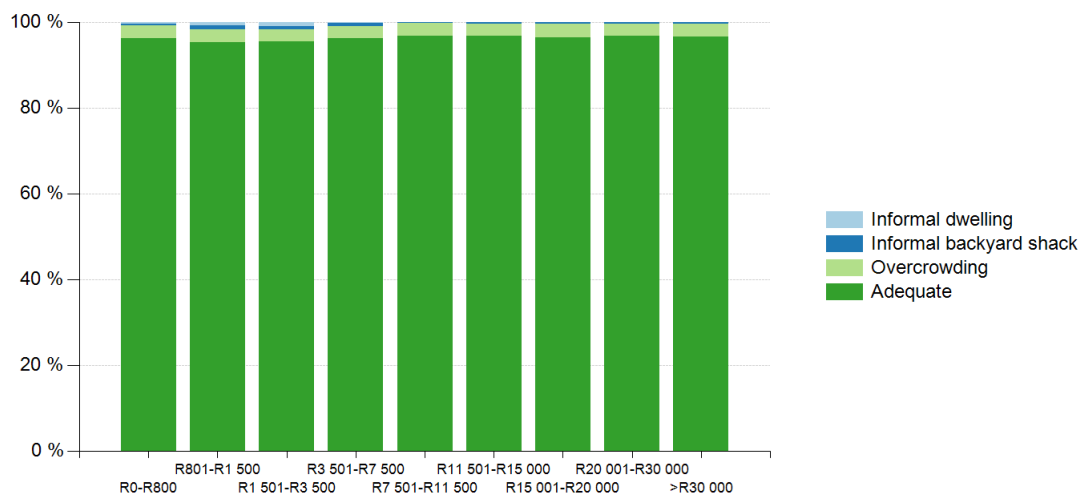
Figure 7: Proportion of household heads above 40 years in each housing state by monthly household income bracket

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Informal dwelling	3	12	21	3	0	0	0	0	0	39
Informal backyard shack	7	15	20	9	1	1	1	1	1	56
Overcrowding	39	51	79	44	15	8	8	10	12	266
Adequate	1 255	1 640	2 548	1 431	497	274	254	342	376	8 617
Total	1 304	1 718	2 668	1 487	513	283	263	353	389	8 978

Table 4: Number of household heads aged **above** 40 years in each housing state by monthly household income bracket

Source: Census 2011

Dwelling type by age of household head
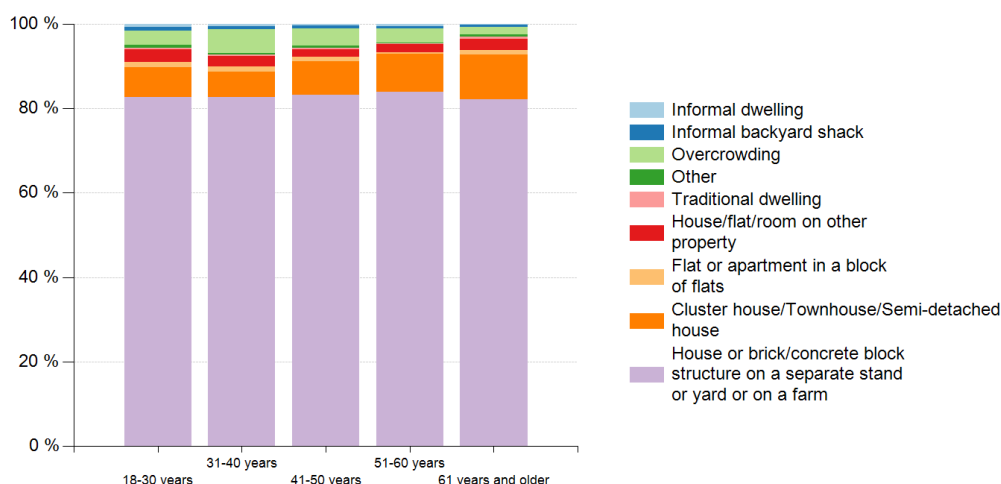
Figure 8: Proportion of households in each dwelling type by age bracket of household head

Source: Census 2011

There is very little change in the distribution of dwelling types by age in the municipality. Households overwhelmingly live in houses or brick/concrete block structures on a separate stand or yard or on a farm, over 80% in all age groups. The largest proportion of inadequate housing in all age groups is overcrowding, which peaks in the 31-40 year old age group before decreasing with age. This is related to the differences in income profile, with younger household heads, having generally lower incomes. With household heads below 40 years of age 6% of households are inadequately housed, while above 40 years only 4% are inadequately housed. These are the lowest in the province in either age category.

Urban/Rural split of inadequate housing

The figure and table below aggregate Census settlement types into those classified as 'urban' and 'rural' (see definitions) and present the number of inadequately housed households in these two settlement categories to illustrate where the housing challenge lies.
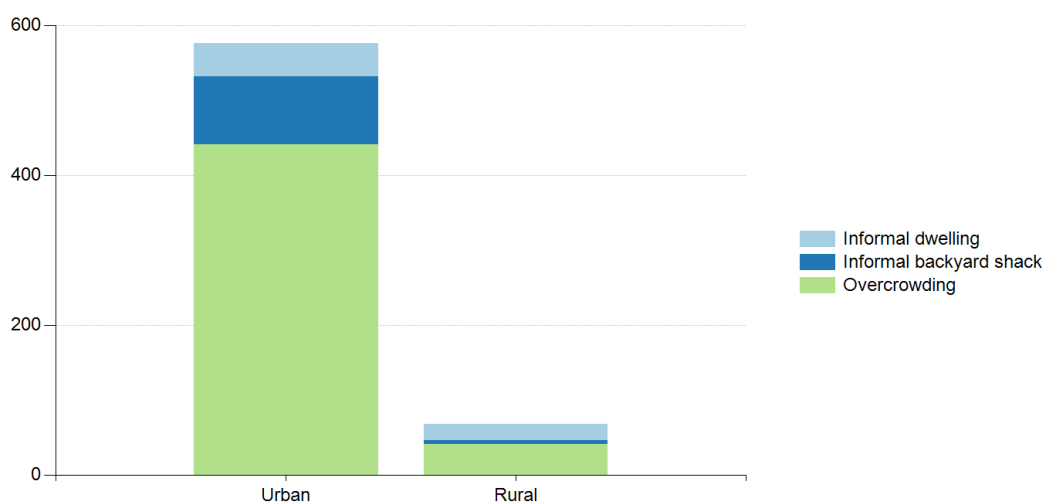
Figure 9: Number of inadequately housed households by housing status and settlement type

	Urban	Rural	Total
Informal dwelling	44	22	66
Informal backyard shack	91	5	96
Overcrowding	441	41	482
Total	576	68	644

Table 5: Number of inadequately housed households by housing state and settlement type

Source: Census 2011

The urban/rural split of inadequately housed households clearly shows that the housing challenges are concentrated in the urban areas, most likely the town of Beaufort West, with inadequacy mostly due to overcrowding. The small number of rural households that is inadequately housed is due largely to overcrowding (41 of 68) and informal dwellings (22 of 68).

Tenure

This section analyses the current tenure status of households, according to the Census categories, by the variables of: income, age and employment.

Tenure status by housing status

	Informal backyard shack	Informal dwelling	Adequate	Overcrowding	Total
Other	13	4	240	12	269
Occupied rent-free	14	28	2 089	65	2 196
Rented	55	15	2 687	117	2 874
Owned but not yet paid off	3	1	1 824	96	1 924
Owned and fully paid off	11	18	6 088	194	6 311
Total	96	66	12 928	484	13 574

Table 6: Number of households in each tenure category and housing state

Source: Census 2011

Note: The Housing Market Segments Report noted that the figures for ownership of informal dwellings and informal backyard shacks are not reliable as there is some uncertainty over the legal status of these dwellings and the properties on which they are located.

Tenure status by monthly income group
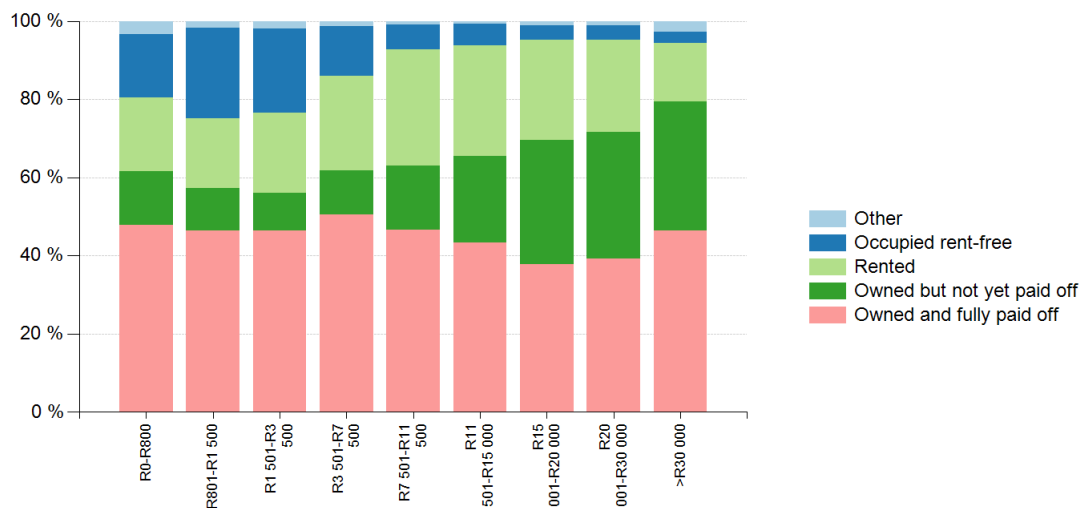
Figure 10: Proportion of households in each tenure category by monthly household income bracket

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Other	83	40	74	27	6	3	4	5	13	255
Occupied rent-free	391	556	811	258	49	22	13	17	14	2 131
Rented	457	425	768	491	229	115	90	110	73	2 758
Owned but not yet paid off	338	260	368	226	125	90	111	150	160	1 828
Owned and fully paid off	1 161	1 108	1 746	1 025	358	176	133	183	226	6 116
Total	2 430	2 389	3 767	2 027	767	406	351	465	486	13 088

Table 7: Number of households in each tenure category and monthly household income bracket

Source: Census 2011

Tenure status by age of head of household
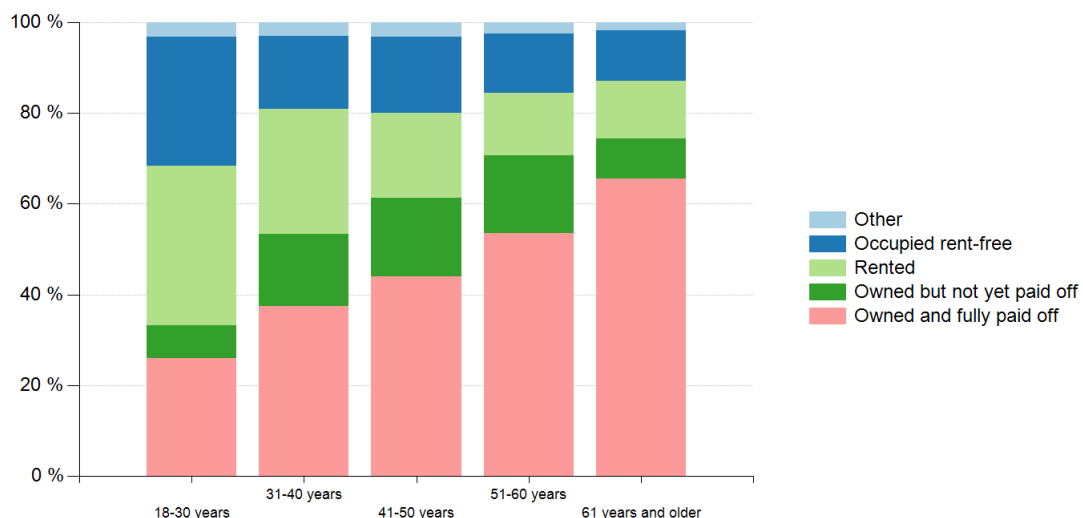
Figure 11: Proportion of households in each tenure category by age bracket of household head

	18-30 years	31-40 years	41-50 years	51-60 years	61 years and older	Total
Other	61	87	102	64	47	361
Occupied rent-free	538	448	530	344	280	2 140
Rented	662	772	585	355	325	2 699
Owned but not yet paid off	138	450	550	450	225	1 813
Owned and fully paid off	490	1 049	1 383	1 393	1 663	5 978
Total	1 889	2 806	3 150	2 606	2 540	12 991

Table 8: Number of households in each tenure category and age bracket of household head

Source: Census 2011

The tenure status figures indicate that a significant proportion of households in lower income groups occupy rent free accommodation, peaking in R801 –R1 500 income category and drops off sharply above an income level of R7 500. From this income level upwards, the proportion of households that own not yet fully paid off houses begins to increase. The

municipality has a comparatively low rate of rental with 37% percent of households either renting or occupying their accommodation rent free. The comparison of tenure status by age of household head shows a general trend of younger household occupying more rental and rent free accommodation, and older household heads owning fully-paid off properties.

Housing status by age and employment status of household head

The Housing Market Segments Report identified employment status as an important determinant of housing and tenure preference. The tables below illustrate the split in housing status according to both age and employment status to more accurately identify the socio-economic profile of housing demand.

Employed household heads

	18-30 years	31-40 years	41-50 years	51-60 years	61 years and older	Total
Informal dwelling	14	11	8	11	2	46
Informal backyard shack	5	7	2	10	0	24
Overcrowding	38	96	68	39	8	249
Adequate	1 113	1 592	1 626	1 129	450	5 910
Total	1 170	1 706	1 704	1 189	460	6 229

Table 9: Number of employed household heads in each housing state and age bracket

Source: Census 2011

Unemployed household heads

	18-30 years	31-40 years	41-50 years	51-60 years	61 years and older	Total
Informal dwelling	1	7	5	2	6	21
Informal backyard shack	12	12	21	9	14	68
Overcrowding	25	66	61	50	40	242
Adequate	727	1 098	1 451	1 472	2 210	6 958
Total	765	1 183	1 538	1 533	2 270	7 289

Table 10: Number of unemployed household heads in each housing state and age bracket

Source: Census 2011

The analysis of housing status by age and employment status of household head suggests that employment of the household head is not a significant factor in the municipality in determining whether a household is adequately housed or not. Age is also not a significant factor. There is no significant proportional difference between household heads that are employed and unemployed and their housing status. This holds true across all age groups. The location of employed younger adults in informal accommodation is significant and may indicate that this accommodation serves to house this segment of the population.

Estimated subsidy non-qualification

The National Housing Code specifies the conditions for qualification for assistance through one of the national housing programmes. The four essential qualification criteria that have been used to calculate the number of non-qualifiers in the municipality are:

1.   South African resident;

2.   18 years old and above;

3.   Not have previously benefited from a government housing subsidy assistance;

4.   Did not previously own residential property;

5.   Married or cohabiting or with financial dependents;

6.   Earning less than the qualifying monthly household income threshold

Most subsidy programmes apply to households earning less than R3 500 per month, but the Finance-Linked Subsidy Programme (FLISP) applies to households earning between R3 500 and R15 000 per month.

A detailed description of the process to calculate the number of non-qualifiers for housing subsidies is provided in end note 3. The income criteria have been included in the analysis by presenting the data in two graphs: one for households earning R0 - R3 500 per month and one for households earning R3 500 - R 15 000. The age criterion has been included by only counting households where the household heads are aged above 18 years. The reasons for non-qualification are therefore given on the figures below as:

1.   Being a foreign born resident

2.   Having received a housing subsidy previously - from the Western Cape Housing Subsidy System

3.   Having previously owned a house (without subsidy assistance) - Households currently owning property less those having received a subsidy

4.   Not having dependents - measured as households of only 1 person

The numbers of households who do not qualify for housing subsidies have been calculated using a range of sources, and should therefore be treated as an estimate only. Note that the Housing Subsidy System does not record the number of subsidies awarded by municipality, so these have had to be split by the proportions of low income households in each municipality in relation to the provincial total.

There are estimated to be **6 677** households earning below R3 500 per month and **2 461** households earning between R3 500 and R15 000 per month that do not qualify for subsidies. This amounts to 78 % of households earning less than R3 500 per month and 77 % of households earning between R3 500 and R15 000 per month. This does not account for the ability of households to access credit as an additional qualification criterion for the FLISP.

Note: These are estimates generated through the study and are meant to provide an indicative sense of the status of subsidy non-qualification.

Estimated subsidy non-qualifiers earning less than R3 500 / month

980 / 14.6%

1 652 / 24.6%

103 / 1.5%

3 972 / 59.2%

Foreigner
Received subsidy previously
Own without subsidy assistance
No dependents
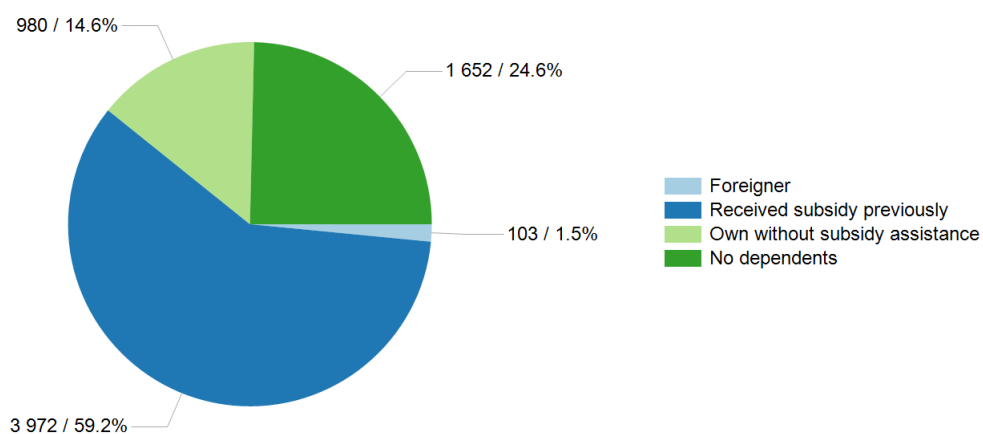
Figure 12: Number and proportion of households (<R3 500/month) not qualifying for housing subsidies by reason

Own calculations using the following sources: Census 2011; Western Cape Housing Demand Database; Western Cape Housing Subsidy System

Estimated subsidy non-qualifiers earning R3 500 - R15 000 / month

237 / 15.7%

24 / 1.6%

1 243 / 82.4%

Foreigner
Own without subsidy assistance
No dependents
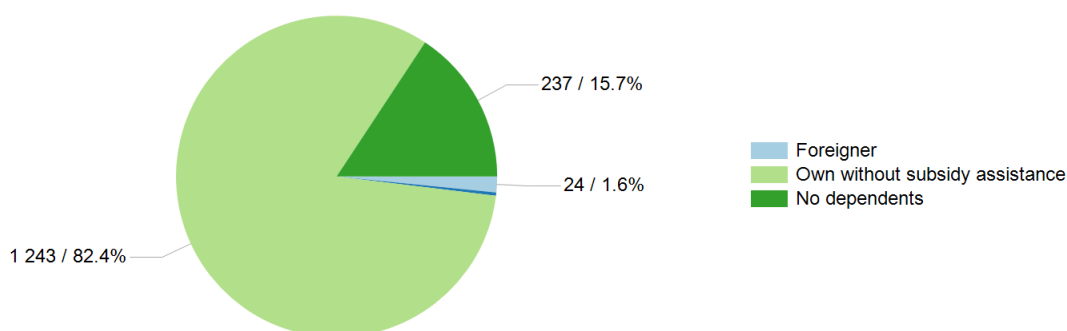
Figure 13: Number and proportion of households (<R3 500-R15 000/month) not qualifying for housing subsidies by reason

Own calculations using the following sources: Census 2011; Western Cape Housing Demand Database; Western Cape Housing Subsidy System

Profile of informal settlements

Overall statistics

Indicator	Source	Year	Total
Total number of informal settlements	Western Cape Informal Settlement Database	2011	1
	Western Cape Informal Settlement Database	2014	3
Total number of informal settlement dwellings	Western Cape Informal Settlement Database	2011	20
	Western Cape Informal Settlement Database	2014	41
Total number of households in informal residential areas	Census	2011	0
Total number of households in informal dwellings	Census	2011	66

Figure 14: Number and proportion of households (<R3 500-R15 000/month) not qualifying for housing subsidies by reason

Own calculations using the following sources: Census 2011; Western Cape Housing Demand Database; Western Cape Housing Subsidy System

The figures below are based on an analysis of the Census data for households in informal dwellings, and not for the informal residential settlement category (see definitions section for more details). In most municipalities the number of households in informal dwellings is higher than the number of households in informal residential areas, and the former number is therefore believed to be more inclusive.

Income profile of households in informal dwellings
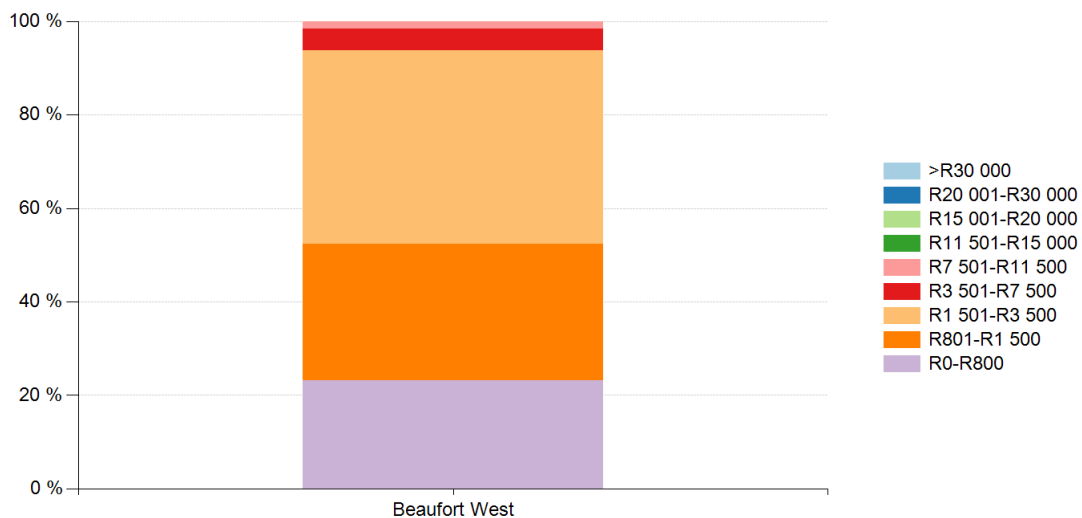
Figure 15: Proportion of households in informal dwellings in each monthly household income bracket

Source: Census 2011

Age profile of household heads in informal dwellings
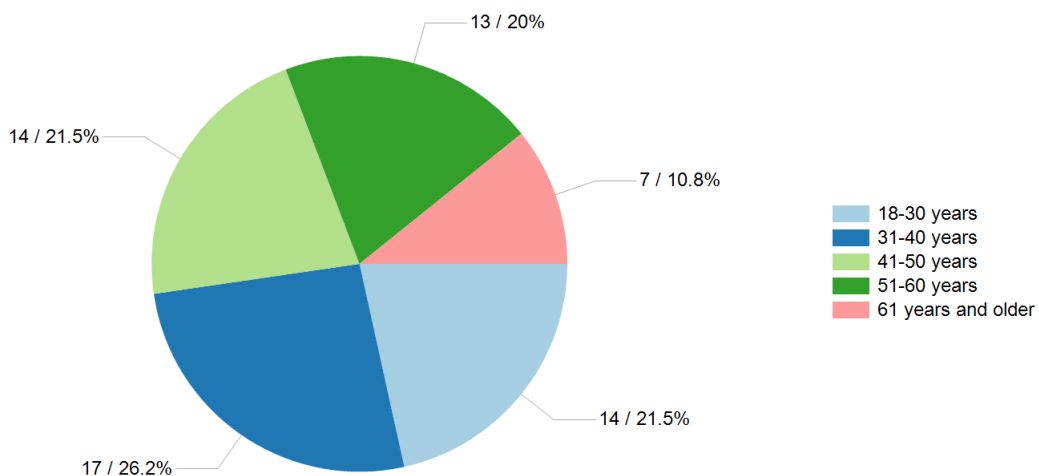
Figure 16: Number and proportion of household heads in informal settlements in each age bracket

Source: Census 2011

Employment status of household heads in informal dwellings
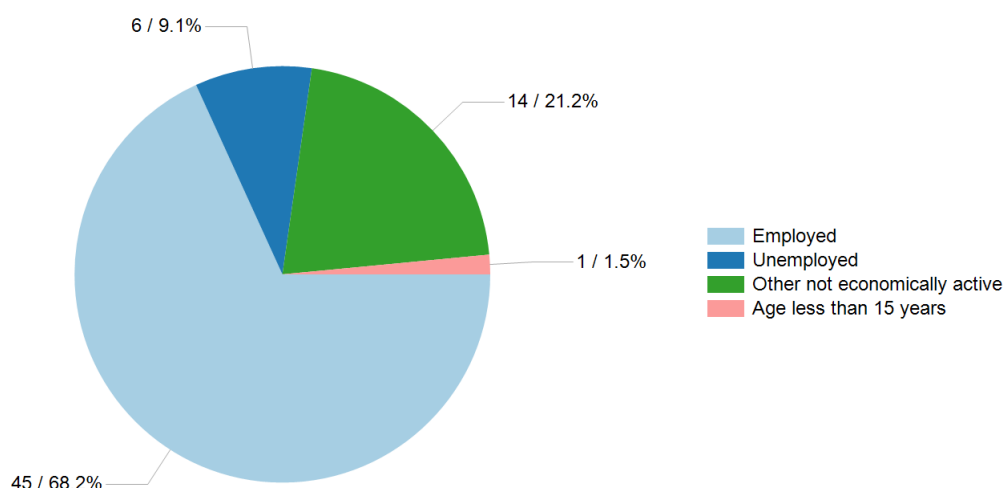
Figure 17: Number and proportion of informal settlement household heads by employment status

Source: Census 2011

There are 3 informal settlements in Beaufort West Local Municipality as of 2014, 2 more than there were in 2011. Just over 98% of households in informal dwellings in the municipality earn less than R7 500 per month. The age of household heads is fairly evenly distributed between the ages of 18 and 60, with the largest age group being 31-40 years at 26%. The smallest age group is over 61 years with about 11%. About 68% of informal settlement household heads are employed, which is a high proportion.

Networked Infrastructure

This section looks at access to engineering services by housing type to try and identify where the largest numbers of un-serviced households lie. The Census data for the three services of water, sanitation and electricity are then cross-tabulated against each other to provide an indication of the number of households that have none of the three services, relative to their housings status. It is not possible to include overcrowded households in this analysis because of the structure of the Census data.

Definitions used for un-serviced households

Water: No access to piped water within 200m

Electricity: Lack of access to electricity for lighting

Sanitation: Lack of access to waterborne toilet facilities or Ventilated Improved Pit toilet

Waste: Service levels other than kerbside collection

ICT: No access to the internet from home

Lack of access to networked services

	Water	Electricity	Sanitation	Waste	ICT
Informal dwelling	15	48	50	41	66
Informal backyard shack	3	25	9	5	91
Adequate	243	974	539	2 049	12 125
Total	261	1 047	598	2 095	12 282

Table 11: Number of un-serviced households by service and housing status

Source: Census 2011

Percentage of un-serviced households by service

	Water	Electricity	Sanitation	Waste	ICT
Informal dwelling	23 %	74 %	77 %	63 %	102 %
Informal backyard shack	3 %	26 %	9 %	5 %	96 %
Adequate	2 %	8 %	4 %	16 %	94 %

Table 12: Percentage of households in each housing sate that are un-serviced with each service

Source: Census 2011

Beaufort West does fairly well in the provision of networked services to adequate households and informal backyard shacks. The biggest service backlogs in the municipality are sanitation, electricity and waste collection in informal dwellings at 77%, 74% and 63% respectively. The biggest backlog in informal backyard shacks is electricity where 26% of households are un-serviced. For adequately housed households the greatest backlog is waste collection with 16% of households un-serviced. Landline internet access to all categories of housing is low.

Number of un-serviced households (combined water, electricity and sanitation services)

	R0-R800	R801-R1 500	R1 501-R3 500	R3 501-R7 500	R7 501-R11 500	R11 501-R15 000	R15 001-R20 000	R20 001-R30 000	>R30 000	Total
Informal dwelling	3	3	8	0	0	0	0	0	0	14
Informal backyard shack	0	1	0	0	0	0	0	0	0	1
Adequate	6	14	15	10	0	0	0	0	0	45
Total	9	18	23	10	0	0	0	0	0	60

Table 13: Number of households in each settlement type without water sanitation and electricity

Source: Census 2011

A total of only 60 households in the municipality have no access to any of the three services. Of these, 45 are adequately housed. These fairly evenly distributed in the income categories between R800 and R7 500. Only 14 informal dwellings and 1 informal backyard shack receive no services.

Dependence on public transport

The only complete data set relating to public transport was the Census data on household access to private motor cars. This indicator gives an indication of exclusive dependence on public transport.

	Beaufort West	Percentage of households in each housing status category without motor car
Informal dwelling	63	96.9%
Informal backyard shack	86	90.5%
Adequate	9 187	71.1%
Total	9 336	71.3%

Table 14: Number of households with no access to a private motor car

Source: Census 2011

There are 9 336 households (71%) in Beaufort West that do not have access to a private motor car and are therefore assumed to be reliant on public or non-motorised transport.

Social Infrastructure

The social infrastructure analysis investigated data on a range of provincial social facilities and municipal community facilities and compared these against norms and standards provided in the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012). The CSIR Guidelines provide nuanced guidance regarding the norms to be applied in various contexts. These norms comprise distance and population thresholds for settlements of different sizes. The population thresholds only have been simplified and used here only to benchmark existing provision, and the thresholds should be critically assessed using the CSIR Guidelines for planning purposes. An explanation of the method for selecting the population thresholds and for data manipulation is provided in endnote 4.

Indicators for facilities for which there are no CSIR norms, or where data is highly variable between municipalities have been omitted. For most of the CSIR norms, a range is provided. For comparison purposes, the average value is used, except where this average value is greater than the municipal population, in which case the minimum of the range is used.

The indicator that is used in each category of social infrastructure is the average population per facility of each type, using the estimated municipal population in **2014** as projected by PwC for the Western Cape Department of Social Development.

Coverage of health facilities

	Average population per facility	CSIR Norm	Coverage relative to norm
Public Clinics	4 646	47 000	Better

Table 15: Coverage of health facilities (Sources: Directorate: Planning - Geographic Information Systems, Western Cape Government: Department of Human Settlements)

Coverage of education facilities

	Average population per facility	CSIR Norm	Coverage relative to norm
Secondary School	8 518	12 500	Better
Primary School	3 651	7 000	Better
Early Childhood Development and Creche	3 006	2 700	Worse

Table 16: Coverage of education facilities (Sources: Directorate: Planning - Geographic Information Systems, Western Cape Government: Department of Human Settlements; Directorate: Research, Population and Knowledge Management - Western Cape Government: Department of Social Development)

Note that coverage of creches only includes facilities registered on the provincial database and does not include unregistered creches.

Coverage of safety facilities

	Average population per facility	CSIR Norm	Coverage relative to norm
Police stations	10 222	80 000	Better

Table 17: Coverage of safety facilities (police stations) (Source: Directorate: Planning - Geographic Information Systems, Western Cape Government: Department of Human Settlements)

Coverage of other public facilities

	Average population per facility	CSIR Norm	Coverage relative to norm
Local Libraries	10 222	20 000	Better
Thusong Centres	25 555	51 110	Better
Cemeteries	0	50 000	Worse

Table 18: Coverage of other public facilities (Source: Directorate Planning - Geographic Information Systems, Western Cape Government: Department of Human Settlements; City of Cape Town)

Note that where zeros appear for Thusong Centres and cemeteries this may be because of a lack of data.

Beaufort West appears adequately served by public clinics, secondary and primary schools, police stations, local libraries and Thusong Centres. However, it appears to have a shortage of early childhood development facilities and crèches and no cemeteries.

Note that this is in relation to the CSIR population threshold norm for the equivalent category of settlement, and does not consider distance thresholds.

Trends

Selected trends relevant to human settlements

Indicator	Source	Value	WC Average
Annual average economic growth (2001-2011)	Quantec	4.2 %	4.1 %
Annual average household growth rate (2001-2011)	Census	3.7 %	3.1 %
Annual average population growth rate (2001-2011)	Census	1.4 %	2.6 %

Indicator	Source	Value	WC Average
New informal settlements (2011-2014)	WC Informal Settlement Database	2	1
Percentage change in household size (2001-2011)	Census	-2 %	-0.5 %

Table 19: Selected trends relevant to human settlements

Analysis and discussion

General discussion

Beaufort West has a very small human settlements challenge compared to other municipalities in the province as only 5% of its households are inadequately housed. However 78% of these have a household income of less than R3 500, so it is likely the majority of the housing burden will need to be borne by the state. Beaufort West has experienced similar economic growth as compared to the rest of the province at 4.2% but has seen slightly higher than average household growth than average at 3.7% between 2001 and 2011. This suggests that demand for housing should be increasing, but household size is decreasing at a rate of 2%, which may help to offset overcrowding in households in the municipality. There has been an increase in the number of informal settlements, with 2 more informal settlements in the municipality since 2011 above the provincial average of 1.

The number of inadequately housed households was calculated to be 652, while the Western Cape Housing Demand Database records 5 291. This difference may be a result of an overestimate on the database (most likely), significant growth since the Census, or errors in the interpretation and manipulation of the Census figures to calculate housing status. However, these two figures provide useful ranges for the planning of human settlement interventions.

A key finding is that the municipality has a small number of inadequately housed household as compared to the rest of the province. Overcrowding accounts for most of the inadequate housing in the municipality.

The municipality is fairly well serviced when it comes to the adequately housed and informal backyard shacks has a severe shortfall in providing services to informal dwellings. In terms of social infrastructure the municipality also has a shortage of early childhood development centres and crèches.

Overall Housing Market Segmentation

The diagram below provides an estimate of the number of households in each of the market segments identified in the Housing Market Segments Report. There are three dimensions to the figure. Firstly, the horizontal axis is divided into the standard income brackets used in this report, corresponding to subsidy qualification criteria or credit limits identified in the Housing Market Segments Report. Secondly, the vertical axis is divided into the rental and ownership markets. Thirdly, the rental and ownership markets are divided into subsidy qualifiers and non-qualifiers, based on the estimates provided earlier in this profile. See end note 4 for an explanation of the ownership/rental division and the split of non-qualifying households. See end note 5 for a detailed description of the components of the housing market segment diagram.
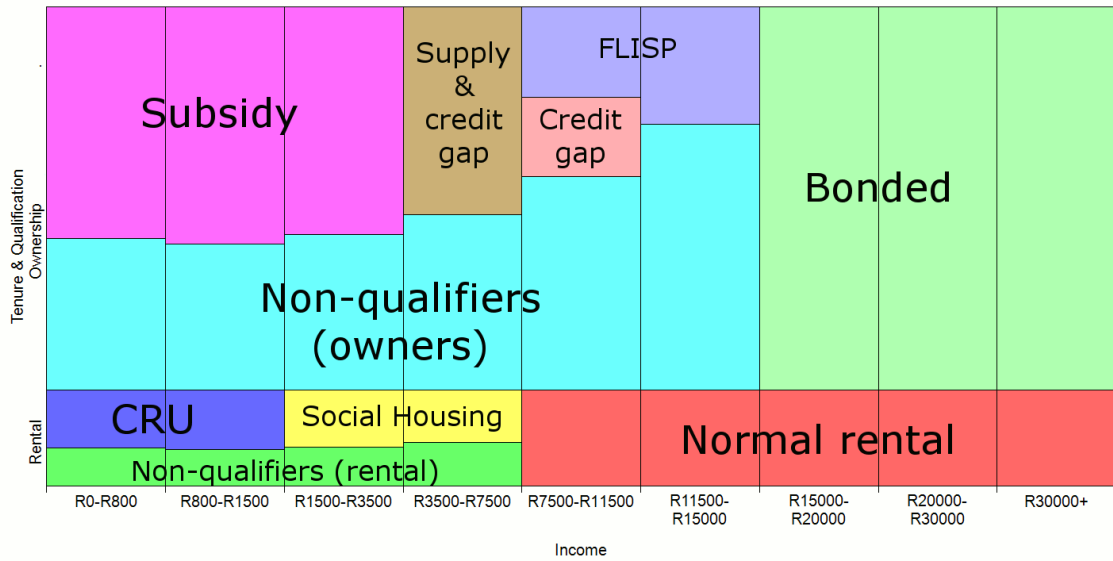
Figure 18: Legend for Housing Market Segmentation
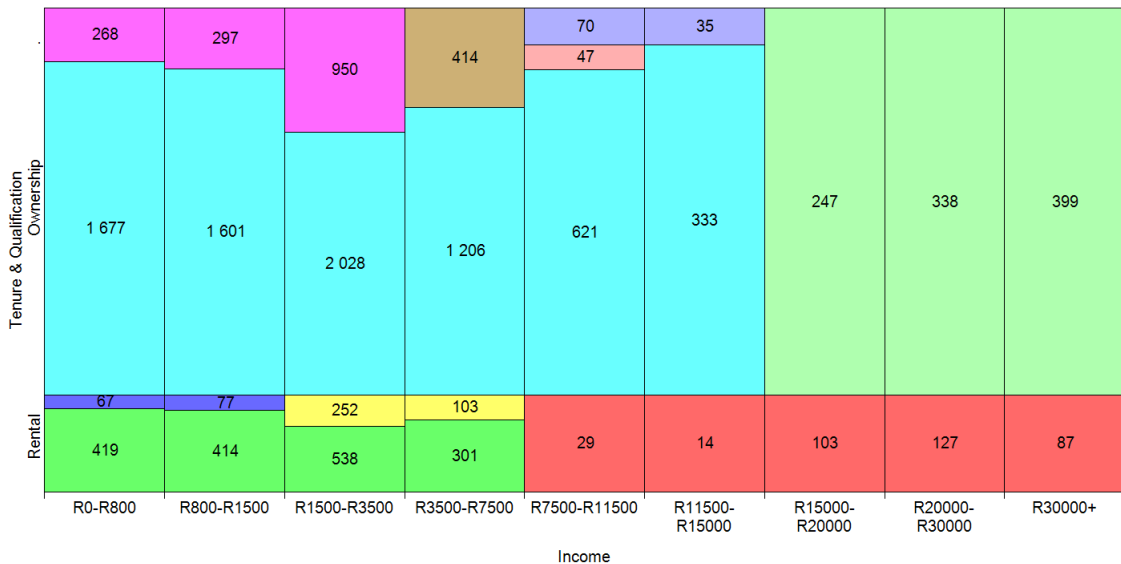
Figure 19: Housing Market Segmentation

Sources: Census 2001; Western Cape Housing Subsidy System 2014; own calculations

The diagram calculates the size of each market in the municipality, but does not compare this against the number of inadequately housed households, which is substantially less than the number of potential subsidy qualifiers. It has not been possible to calculate how many of the inadequately housed households do not qualify for subsidy assistance. However, the total figure for non-qualifiers is significant in proportion to the size of the municipality, and may be of concern to the municipality given that these households are likely to remain in informal circumstances. The gap market in Beaufort West has been calculated to be 461 households, made up of 414 households in the supply and credit gap, and 47 households in the credit gap.

End notes

1. Income bracket adjustment

All representations of household data by income bracket have involved the manipulation of Census 2011 data to align with new monthly income brackets defined in the Housing Market Segments Report. The Census 2011 Annual Household Income was first converted into a monthly income figure. The number of households in the new monthly income bracket was calculated by adding the proportion of the new monthly income bracket that straddled the Census income monthly brackets, multiplied by the number of households in each of the Census monthly income brackets. Simple linear interpolation was used, which assumes that households are evenly distributed across income monthly brackets. The figure below illustrates the process used to calculate the number of households falling into the new monthly income bracket between R1 500 and R 3 500 per month.

$$\text{No. of households in new category} = \left[\frac{(1\,633 - 1\,500)}{(1\,633 - 800)} \times c\right] + d + \left[\frac{(3\,500 - 3\,183)}{(6\,367 - 3\,183)} \times e\right]$$

Existing Census income brackets

R 1 500   R 3 500

Revised income bracket
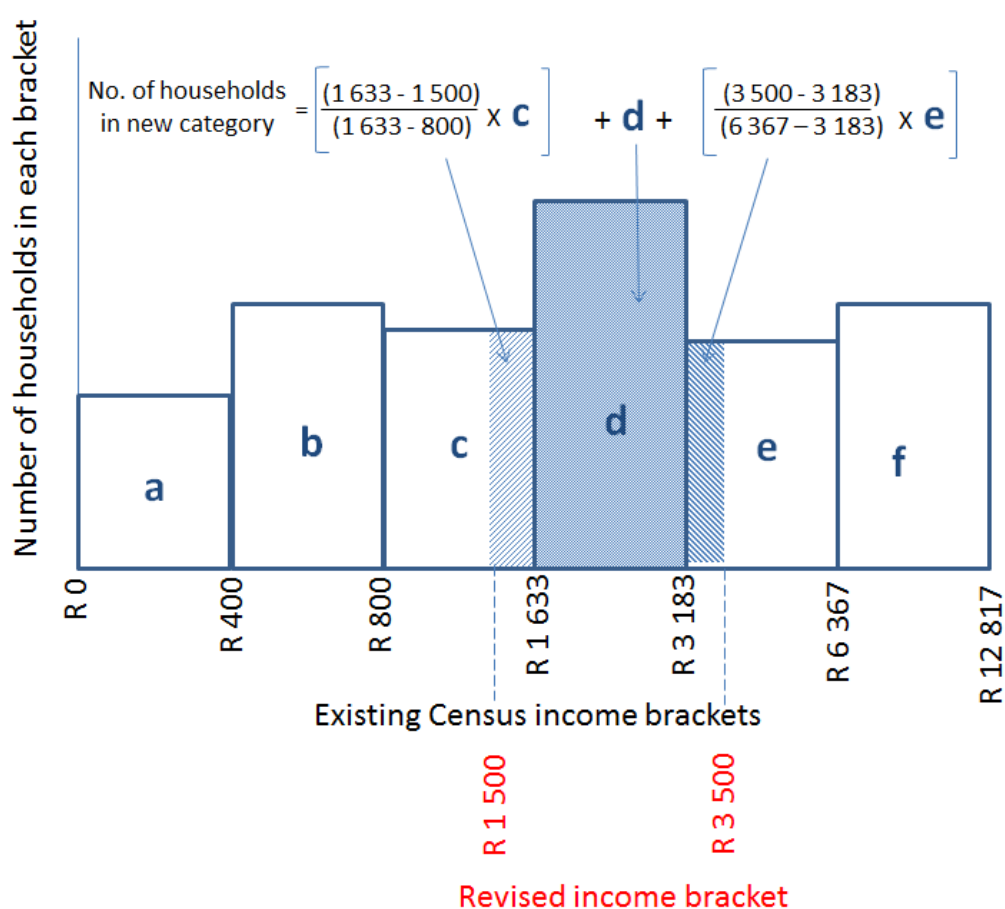
2. Overcrowding calculation

The methodology used to calculate overcrowding is based on the methodology used by the City of Cape Town for the modelling undertaken for the Integrated Human Settlements Framework. The point of departure was a definition of overcrowding given by the U.S Department of Housing and Urban Development: Office of Policy Development & Research (2007) Measuring Overcrowding in Housing (available online at http://www.huduser.org/publications/pdf/measuring_overcrowding_in_hsg.pdf) of more than 2.5 people per habitable room (i.e. excluding kitchens, bathrooms, store rooms, etc.). However, the South African Census does not distinguish between habitable and non-

habitable rooms. Therefore the definition was modified to be more than 2 people per (total) room. This assumes that there are four habitable rooms for every non-habitable room, which is believed to produce a roughly equivalent outcome to that of the US Department of Housing and Urban Development definition.

To determine the number of households that are overcrowded, the following methodology was followed:

Step	Description
Step 1:	Census data for household size and number of rooms was cross-tabulated, producing a table indicating the number of households having 1 person in 1 room, 2 people in 1 room, 1 person in 2 rooms, etc., each of which represents a occupancy 'case'.
Step 2:	For each case, the number of overcrowded people was determined by taking the household size and subtracting the number of rooms multiplied by 2 (people per room - representing the theoretical maximum comfortable occupancy level), producing the number of overcrowded people per 'case'.
Step 3:	The number of overcrowded people was divided by 2 (people per room) to produce the number of additional rooms required per 'case'.
Step 4:	The number of additional rooms was divided by an assumed value of 2 for the number of rooms in a new house to produce the number of households requiring accommodation per 'case'. While the average number of rooms per formal dwelling in the Western Cape is higher than this (4.72), the lower figure is based on the size of new IRDP housing. The assumption therefore indicates the need for a new house (and therefore 1 overcrowded household) for every four people in an overcrowded dwelling.
Step 5:	The number of households requiring accommodation per 'case' was multiplied by the number of households in each case (see step 1) to produce the number of overcrowded households.

The following example illustrates the process:

Step	Description
Step 1:	There are 120 households living in the housing case: 10 people living in 2 rooms
Step 2:	Number of overcrowded people = 10 - (2x2) = 6
Step 3:	Number of additional rooms required = 6 ÷ 2 = 3
Step 4:	Number of additional dwellings required = 3 ÷ 2 = 1.5 - rounded up to 2.
Step 5:	Number of households overcrowded = 120 x 2 = 240.

3. Subsidy non-qualifiers

The subsidy conditions stipulate the following five essential criteria:

Criterion	Description
Criterion 1:	Must be a South African resident
Criterion 2:	Must be 18 years or older
Criterion 3:	Must not have previously benefited from a government housing subsidy
Criterion 4:	Must not have previously owned residential property
Criterion 5:	Must be married or cohabiting or with financial dependents
Criterion 6:	Must have a household income of R0-R3 500 per month for a full subsidy, or R3 500 - R 15 000 for a FLISP subsidy.

The following data sets were used as direct or proxy measures for the above criteria:

Criterion	Description
Criterion 1:	Census 2011
Criterion 2:	Census 2011
Criterion 3:	WC Housing Subsidy System
Criterion 4:	Census 2011
Criterion 5:	Census 2011
Criterion 6:	Census 2011 and WC Housing Demand Database

The following process was followed:

3. Subsidy non-qualifiers

Step	Description
Step 1:	The number of households in each qualifying income bracket was extracted from Census 2011 (Criterion 6) and cross-tabulated against age (Criterion 2) and tenure status (Criteria 3 and 4).
Step 2:	The number of single person households (Criterion 5) per income bracket was extracted from Census 2011.
Step 3:	The number of foreign individuals (Criterion 1) was extracted from Census 2011 and divided by an assumed household size of 2 to calculate the number of foreign-headed households. These households were distributed proportionately between the revised income brackets according to the split of the total municipal population.
Step 4:	The number of non-qualifying households calculated in Steps 1, 2 and 3 were added together to obtain the total number of non-qualifying households in each income group.

Given the lack of a full data set on many of the criteria, and the inability to cross-tabulate across the various data sets, the following assumptions had to be made:

Step 1 assumes that a) all people who have previously owned property still owned their properties in 2011 and b) that all those that have received a subsidy still own their properties. Both of these simplifying assumptions will tend to underestimate the number of non-qualifiers. In addition, it ignores the in-migration of people who have received a subsidy in another province, thereby assuming that this does not take place, or nets out with subsidy beneficiaries leaving the province. As there is positive net in-migration to the province, this assumption will tend to underestimate the number of non-qualifiers.

Step 2 assumes that any household greater than 1 person either comprises a spouse, co-habiting partner or financial dependent. As the definition of 'household' in Census 2011 could include 2 financially independent and unrelated adults, this assumption will tend to overestimate the number of subsidy qualifiers, and thus underestimate the number of non-qualifiers.

Step 3 assumes that foreign residents are distributed across income groups in the same proportions as the total population, and on average form households of 2 people. As there is no data to support these assumptions, the impact of this assumption is unknown.

All of the assumptions made in steps 1 and 2 underestimate the number of non-qualifiers. However, there is an element of double counting where single person households own their dwellings, and therefore these two dynamics may tend to cancel on another out.

4. Tenure preference

Tenure propensity is a combination of preference and circumstance. In many cases, households may prefer to own a property, but may not be able to afford to do so. In other cases, people may be able to afford a house, but prefer to rent (for various reasons). Two sources of data were used to determine tenure propensity. Firstly, the tenure preference of households is indicated in the Western Cape Human Settlements Demand Database. Understandably, this data illustrates a very clear preference for home ownership amongst all income brackets. Secondly, the existing tenure arrangements as measured by Census 2011 provide an indication of tenure propensity forced through circumstance, as well as

preference to rent at higher income levels. However, many of these households would opt to own rather than rent if they had a choice. Analysis of the Census data undertaken for the Housing Market Segments Report concluded that there appears to be a minimum of 20% of household at all income brackets that would prefer to rent. Given these data sources and their inherent weaknesses, the following methodology was followed to determine the split of households likely to own versus rent in each income bracket:

1. The average value was calculated between the current percentage of households that rent (or live rent free) from Census 2011 and the percentage of households that stated a preference to rent in the WC Housing Demand Database.

2. If this value for rental propensity was greater than the observed minimum of 20% of households in any income bracket, then the average value was used, otherwise the 20% value was used.

5. Housing Market Segmentation

A housing market segment report produced for this study which, based on a desktop literature review and stakeholder engagements, constructed a framework for understanding housing markets in the Western Cape province. The key housing demand dimensions were identified to be household income (monthly in this study), tenure status (ownership versus rental) and state housing finance qualification criteria. Based on these key dimensions, the housing market segments were delineated according to the categories in **Error! Reference source not found.**.

Tenure status and related housing programmes	Monthly household income (Rands)						
	0 - 800	801 - 1 500	1 501 - 3 500	3 501 - 7 500	7 501 - 11 500	11 501 – 15 000	>15 001
Owned							
State-subsidised housing	x	x	x				
Supply & credit gap				x			
Finance Linked Individual Subsidy Programme (FLISP)				x	x	x	
Credit gap					x		
Non-qualifiers	x	x	x	x	x		
Bonded							x
Rental							
Community Residential Units (CRU)		x	x				
Social Housing			x	x			
Non-qualifiers	x	x	x	x			
Normal rental					x	x	x

Table 20: Housing market segmentation

Source: Own assessment based on literature and stakeholder engagements

The nature of these categories is explained in **Error! Reference source not found.**.

Tenure status and related housing programmes	
Owned	
State-subsidised housing	State housing finance mechanisms for households earning below R3 500/month.
Supply & credit gap	The Housing Market Segments Report identified a supply and credit gap in the R3 500-R 7500 income bracket. This means the market is unwilling or unable to supply a product that could be afforded by households in this bracket, even if they were able to access credit and the FLISP subsidy.
Finance Linked Individual Subsidy Programme (FLISP)	For households earning between R3 500 and R15 000/month, the FLISP programme is available. However, not all households within the FLISP income band are able to access it due to the lending limit (household income of R11 500). Such households then represent part of the 'gap' market whose needs are partially being met through Financial Sector Charter loans.
Credit gap	The housing market segment report identified a credit gap in the R7 500-R11 500 income bracket indicating that 60% of households in this bracket would be unable to access the credit required as a condition of the FLISP subsidy.
Non-qualifiers (owners)	While there are a number of programmes which households can access to meet their demand, there are also notable limitations to their capacity to access such opportunities. If a household does not meet the qualification criteria of state-funding or those of lending institutions, they fall into a category of 'non-qualifiers'. It is inferred, on the basis of the literature reviewed, that many of these non-qualifiers are reverting to residence in informal dwellings (such as shacks or traditional housing) to meet their demand. Some such non-qualifiers include, but are not limited to, non-South African citizens or parties who may have previously benefited from state housing programmes.
Bonded	Beyond an income of R15 000 households are expected to revert to the bonded market.
Rental	
Community Residential Units (CRU)	State housing programmes for households earning between R800 and R3 500/month.
Social Housing	State housing programmes for households earning between R1 500-R7 500/month.
Non-qualifiers (rental)	While there are a number of programmes which households can access to meet their demand, there are also notable limitations to their capacity to access such opportunities. If a household does not meet the qualification criteria of state-funding or those of rental institutions or landlords, they fall into a category of 'non-qualifiers'. It is inferred, on the basis of the literature reviewed, that many of these non-qualifiers are reverting to residence in informal dwellings (such as shacks or traditional housing) to meet their demand. Some such non-qualifiers include, but are not limited to, non-South African citizens or parties who may have previously benefited from state housing programmes.
Normal rental	It is still not fully clear what the income band boundary between the non-qualifier and normal rental markets are but it is assumed these overlap partially at an income of R7 500/month.

Table 21: Housing market segmentation descriptions

Source: Own assessment based on literature and stakeholder engagements