ART. XIV – Housing conditions in Carlisle in 1917 By Jean Turnbull, B.A., Ph.D.

URING the First World War a shortage of working-class housing and subsequent rent rises led to rent strikes and widespread unrest. The scale of disorder led to the setting up of a Royal Commission into Industrial Unrest which reported in 1917 and identified poor housing conditions as a major source of discontent.¹ In order to determine the scale of the problem nationwide, the Local Government Board asked all local authorities to provide details of housing shortages and unfit dwellings in their areas in July 1917.² Armed with the information collected from local authorities throughout the country, the government recognised that a large-scale housebuilding programme would be required to resolve the serious housing problems in the post-war period. The scale of the problem was immense: Addison, the Minister of Housing, estimated that one million houses in England and Wales in 1918 contained two rooms or less and that many of these lacked basic amenities.³

Carlisle was one of the most important regional centres in the north of England in the early twentieth century.<sup>4</sup> The city contained many older properties and it can be assumed that Carlisle would have faced similar housing-related problems to those of other large cities in Britain at this time. The purpose of this article is to assess the condition of housing in the city of Carlisle within the nationwide context of concerns over housing. The paper uses material collected by Carlisle Corporation into the state of the city's housing stock in September 1917 to compare and contrast Carlisle's housing experience with the trend nationwide. The evidence is also examined to assess the impact of more than 50 years of housing regulation and legislation on the poorest quality housing identified in the Board of Health Report of 1850.

## Carlisle: The eighteenth and nineteenth century context

From the late eighteenth century industrial activity was increasingly important to Carlisle's growth and development. Road improvements, a canal, and later the arrival of seven railways companies ensured that Carlisle had become a major communications centre by the late nineteenth century. Railways were so important to Carlisle in the late nineteenth and early twentieth centuries that the Board of Trade report of 1908 described the city as the "traffic clearing house of the west".<sup>5</sup>

The population of Carlisle increased steadily throughout the nineteenth and twentieth centuries, principally due to industrial growth. Between 1798 and 1841 it maintained its position as the forty-fifth largest urban centre in England and Wales.<sup>6</sup> However, although its population continued to increase, it lost ground to more rapidly expanding urban centres in the late nineteenth and early twentieth centuries (Table 1).<sup>7</sup> Despite this, in the regional context, Carlisle increased its share of the local population throughout the period. In 1908 the Board of Trade noted the increasing dominance of Carlisle within the county of Cumberland, citing the 16.1 per cent increase in the city's population in the decades 1891 to 1901 compared to only 0.1 per cent in the county as a whole.<sup>8</sup>

Date	Population	% increase
1811	12,531	
1831	19,069	52.2
1851	25,598	33.0
1871	33,680	31.6
1891	39,176	16.3
1921	52,225	38.7

TABLE 1. Population of Carlisle 1811-1921.

Source: Census returns.

A number of the industries upon which the city's continued growth in the late nineteenth and early twentieth centuries was founded were of relatively long standing. The textile industry was the city's largest employer in the early nineteenth century, occupying approximately 17 per cent of the city's total population in 1838.9 The textile industry continued to provide employment, particularly to women, through the early twentieth century. The textile factories were sited outside the old walled city in the earliest industrial suburbs of Caldewgate and Denton Holme. Other industries set up in the early nineteenth century which continued to flourish through the early twentieth century included biscuit works, engineering works and metal works. Throughout the nineteenth century, increasing numbers of people were employed in the transport and communications industries. By 1919 railway workers were the largest occupational grouping in the city, as noted in the Annual Report of the city's Medical Officer of Health. At this date the industry accounted for 13.1 per cent of all occupied males.<sup>10</sup>

## Housing: the nineteenth century legacy

The city walls had restricted the growth of Carlisle until they were removed in 1811. As a result, substantial levels of overcrowding had been generated within the restricted walled area.<sup>11</sup> However, even before the walls were removed housing followed industrial development into the industrial suburbs to the south and west of the city, mostly in Caldewgate and Denton Holme (see Fig. 1). By 1851 these suburbs housed a population of 18,000, almost two-thirds of the city's total population at this date.<sup>12</sup> Barnes has described these areas close to the factories as "ghettos".<sup>13</sup> They continued to house a substantial proportion of the workforce into the twentieth century: in 1908 the Board of Trade noted that the largest proportion of the city's workforce lived in Caldewgate and Denton Holme.<sup>14</sup>

The city's boundaries were expanded in 1912 to include Botcherby (ward 5), Blackwell (ward 6) and Stanwix and Etterby (ward 1) (Fig. 1). These suburban areas were to prove important in the building programmes carried out in the years from 1919.

The housing built in the early nineteenth century when the population was increasing most rapidly can be divided into two main types. The first, designed for the middle classes, were large terraced houses built in squares, rows or crescents. These houses were mostly situated on the east of the city close to the city centre. As late as 1917 they were occupied mainly by professionals and those owning



Fig. 1. Ward boundaries, Carlisle 1912-1946.

businesses.<sup>15</sup> The second type were high-density, heavily congested courtyard or back-to-back developments designed for the working class. Inevitably, the latter were more numerous than the former. A Board of Health Report of 1850 described the dwellings of the poor in the city as "too few in number and of faulty construction". It also commented that they had been built "without regard to drainage, ventilation and the necessary conveniences of life".<sup>16</sup> Caldewgate, the largest industrial suburb, was singled out for particular criticism as a large proportion of the population living in this area lived in tenements of only one room. At this date it was estimated that approximately one-third of the city's population lived in similar conditions.<sup>17</sup>

After 1865 the Board of Health took firm control of all new building in the city, ensuring that no further back-to-back houses were built and that certain basic housing standards were maintained.<sup>18</sup> In this Carlisle was following a precedent set by other urban centres that implemented local legislation under the 1845 Public Health Act.<sup>19</sup> From 1865 most houses built in the city were larger, self-contained,

terraced properties, although many remaining back-to-back and tenement dwellings were inhabited well into the twentieth century.

The Board of Trade Enquiry of 1908 noted the different types of accommodation available to the working classes in the city: these included older properties, often divided into tenements; numerous back-to-back houses with three rooms; older terraced properties with three and four rooms and newer, four and five-bedroomed houses built in the years after 1880.<sup>20</sup> The number of houses built each year in Carlisle was listed in the Medical Officer of Health's annual reports in the years up to and beyond 1917. Between 1891 and 1906 the number of houses built in the city exceeded 140 in all but one year. In all, 3,011 houses were built in these years (Table 2.). This level of activity was not unique to Carlisle: from the 1880s to the early twentieth century towns and cities in the country were the scene of unprecedented housebuilding activity.<sup>21</sup> After 1906 the situation in Carlisle changed: only 189 houses were built between 1907 and 1918 (Table 2.). Here, too, a similar pattern can be identified in other urban centres in Britain.<sup>22</sup>

**Number of Houses** Date Number of houses Date Q 

TABLE 2. Number of houses built in Carlisle 1891-1918.

Source: Medical Officer of Health Reports 1891-1918.

It has been suggested that the virtual cessation in housebuilding in Carlisle in these years was a result of the depressed state of the city's economy, rather than because of a glut of houses.<sup>23</sup> Studies of other towns have concluded that the latter may have been the main cause of a general decline in housebuilding activity in these years.<sup>24</sup> The corporation's own statistics suggest that overbuilding may have occurred in Carlisle: in January 1914 the corporation undertook a census of empty houses and found 115 in the city.<sup>25</sup> However, whatever the position in 1914, by 1917 various changes, including an influx of thousands of munitions workers, had led to a substantial housing shortage in the city as we shall see below.

## The 1917 Housing Census: the source

Carlisle Corporation undertook its Housing Census as a result of receiving Circular 86 from the Local Government Board in July 1917.<sup>26</sup> The Corporation's response

was immediate and a housing sub-committee was set up to look into the matter. In August 1917 the Town Clerk reported to this body with a main recommendation that a "searching and detailed inspection and census of the city" should be made in order to submit "comprehensive and adequate proposals and schemes" to the Local Government Board.<sup>27</sup> The census was designed to determine the number of new properties required in addition to existing stock as well as calculating the exact number of dilapidated and insanitary properties in the city to be cleared at some future date.<sup>28</sup>

By 17 September 1917 the City Surveyor was able to give detailed proposals for the taking of the census, including the insertion of advertisements in the local press requesting the co-operation of the public in the matter. The census was taken in the week ending 29 September.<sup>29</sup> As a result, this remarkable source, which gives full details of every house in Carlisle, was complied. An examination of the Local Government Board records suggests that Carlisle may have been unique in undertaking a survey of this depth and level of detail.<sup>30</sup>

The census was arranged on a ward-by-ward basis with each of the 10 wards subdivided according to size into 30 enumeration districts (Fig. 2.). The information collected in the census for each house is detailed in Table 3. As a result of the

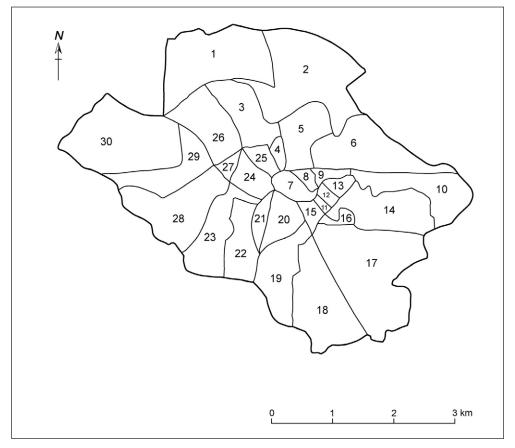


FIG. 2. Carlisle Housing Census district boundaries, 1917.

census the Corporation was in a position to calculate the exact housing needs of the city, both in terms of an absolute shortage of housing and of properties to be closed or demolished at some future date.

TABLE 3. Information included on the 1917 Housing Census sheets.

#### Format of the Census sheet

Street and number

House type

Name of owner

Name of occupier

Occupation of occupier

Number of rooms

Is living room used for sleeping?

Does the house contain a bath?

Number of families occupying the house

Total number of people in the house

Number of male and female lodgers

Whether married lodgers require a house

The rent of the proprty

How many members of the family were serving in the armed forces

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

In all, the 1917 Housing Census includes details on almost 12,000 dwellings in the city of Carlisle. It contains a vast store of information on each house and provides a detailed snapshot picture of housing conditions in Carlisle on one day in September 1917.<sup>31</sup>

# Housing in Carlisle in 1917

As noted above Carlisle's Housing Census in 1917 was designed to provide information for the Local Government Board but it also provided the city with a clear and detailed picture of the condition of its housing stock at that time. In all, Carlisle Corporation calculated that a further 2,100 new houses would be required in the post-war period, a figure which included 600 houses to make up for the existing shortage and a further 1,500 houses to replace poor quality and substandard housing.<sup>32</sup>

The census provides information on many different aspects of housing in Carlisle. This paper is concerned with the size and type of dwelling, the condition of the housing stock and the level of overcrowding which existed in the city at that time. More particularly, it is concerned with the extent to which spatial variations in housing quality and levels of overcrowding were to be found in different parts of the city.

One of the major concerns of the authorities nationally was the size of dwelling available to the working-class population. In 1921, before the post-war building programme had made a substantial impact upon the nation's housing stock, the government calculated that almost one-third of all households in England and Wales were living in dwellings containing no more than three rooms.<sup>33</sup> The Carlisle Housing Census of 1917 shows that one-fifth of all dwellings in Carlisle contained two rooms or less; 23 per cent were three-roomed; 39 per cent were four and five-bedroomed and 18 per cent contained six or more rooms (Table 4). Thus the 43 per

cent of dwellings with three rooms or less was substantially higher than in the country overall, demonstrating the substantial nature of the housing problem faced by the city of Carlisle.

TABLE 4. Number of rooms per house, Carlisle, 1917.

District	1 % (no.)	2 % (no.)	3 % (no.)	4 % (no.)	5 % (no.)	6+ % (no.)
1	0 (1)	9 (35)	18 (71)	10 (41)	28 (113)	35 (136)
2	2 (10)	10 (37)	12 (44)	9 (32)	20 (77)	47 (176)
3	3 (10)	31 (89)	18 (52)	20 (58)	15 (43)	13 (36)
4	10 (37)	29 (103)	20 (74)	15 (55)	11 (38)	15 (54)
5	5 (16)	9 (28)	8 (23)	4 (11)	5 (14)	69 (209)
6	0 (1)	0 (0)	1 (2)	6 (13)	24 (47)	69 (141)
7	16 (73)	27 (124)	17 (77)	11 (50)	9 (44)	20 (91)
8	0 (0)	0 (0)	1 (2)	1 (1)	20 (37)	78 (144)
9	0 (0)	1 (2)	0 (1)	1 (2)	21 (64)	77 (237)
10	0 (1)	2 (5)	10 (29)	16 (46)	28 (77)	44 (124)
11	7 (34)	20 (98)	34 (165)	19 (90)	13 (63)	7 (33)
12	0 (0)	3 (10)	27 (96)	35 (127)	31 (113)	4 (15)
13	0 (0)	0 (0)	3 (8)	35 (105)	38 (114)	24 (72)
14	3 (8)	9 (25)	20 (54)	31 (84)	33 (89)	4 (9)
15	3 (12)	32 (131)	37 (152)	15 (62)	7 (27)	6 (26)
16	1 (3)	3 (20)	50 (300)	24 (142)	19 (115)	3 (18)
17	0 (0)	2 (4)	8 (19)	16 (40)	45 (111)	29 (73)
18	0 (0)	6 (33)	47 (272)	12 (72)	29 (171)	6 (34)
19	0 (0)	2 (14)	13 (74)	15 (85)	52 (298)	18 (102)
20	15 (68)	43 (193)	25 (107)	9 (41)	5 (22)	3 (13)
21	0 (1)	25 (101)	18 (72)	40 (160)	16 (63)	1 (5)
22	1 (6)	12 (68)	17 (94)	30 (171)	37 (209)	3 (19)
23	0(1)	9 (38)	16 (67)	19 (78)	29 (124)	27 (112)
24	8 (46)	39 (241)	27 (164)	14 (87)	10 (60)	2 (14)
25	13 (46)	29 (101)	16 (54)	13 (46)	9 (33)	20 (68)
26	9 (28)	41 (134)	33 (105)	10 (31)	4 (13)	3 (12)
27	9 (51)	29 (166)	31 (176)	19 (110)	10 (56)	2 (13)
28	1 (3)	8 (28)	40 (134)	26 (88)	15 (51)	10 (35)
29	3 (14)	21 (85)	30 (121)	14 (56)	21 (82)	11 (44)
30	1 (4)	7 (29)	33 (146)	19 (83)	35 (151)	5 (22)
All houses in city	4 (474)	16 (1,942)	23 (2,755)	18 (2,067)	21 (2,519)	18 (2,087

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

However, houses in these different size categories were not evenly distributed throughout the city (Table 4, Figs. 3 & 4). Wards 1 and 3, to the north and east of the city, contained a high proportion of very large houses, with 40 per cent and 48 respectively, whilst others, most notably wards 7 and 9 to the south and west of the city, contained far less, three per cent and five per cent respectively. Analysis at the district level is even more striking: in four suburban districts (5, 6, 8 and 9) the proportion of houses with six rooms or more was 69 per cent or higher. This contrasted sharply with the 10 districts with figures of five per cent or less (12, 14, 16, 20, 21, 22, 24, 26, 27 and 30) (Table 4). When the figures for one and two roomed-dwellings are examined, an equally uneven spatial pattern emerges with very low levels in all the suburban districts and levels as high as 40 per cent or more in some of the older centrally-situated districts (Table 4, Fig. 3). The largest

proportion of medium-sized four and five-roomed houses were to be found in the suburbs to the south and west (Table 4).

Those areas with large numbers of very small houses were the ones in which early-nineteenth century working-class housing was dominant. In Caldewgate (ward 9, districts 26, 27 and 28) before 1865, when back-to-back housing was outlawed by the Board of Health, housing was built to a density as high as 122 to the acre. After 1900, terraced housing was still being built in this area at 62 to the acre and it can be assumed that these houses contained no more than three rooms. In suburban Rickergate (districts 5, 6, 8 and 9) densities were much lower at six to the acre (1850-75) and three to the acre (1880-1900). Clearly houses built at such a low density could be very large (see Table 4, Fig. 4). Land in Rickergate was owned by the Duke of Devonshire who carefully controlled the density, size and quality of housing built on his land, a control which was not exercised elsewhere in the city. Those areas where the greatest proportion of four and five-roomed housing dominated were generally built up with bye-law terraces after 1870.

TABLE 5. Types of houses, Carlisle, 1917.

2   80 (300)   8 (31)   10 (39)   2 (6     3   48 (138)   34 (98)   12 (34)   6 (1     4   12 (41)   49 (178)   23 (83)   16 (5     5   75 (228)   4 (11)   12 (36)   9 (2     6   99 (200)   0 (0)   0 (1)   1 (1     7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   3 (8     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     1	District	Self-contained % (no.)	Back-to-back % (no.)	Tenement % (no.)	Business Premises % (no.)
3   48 (138)   34 (98)   12 (34)   6 (1     4   12 (41)   49 (178)   23 (83)   16 (5     5   75 (228)   4 (11)   12 (36)   9 (2     6   99 (200)   0 (0)   0 (1)   1 (1     7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1	1	90 (357)	2 (8)	6 (25)	2 (7)
4   12 (41)   49 (178)   23 (83)   16 (5     5   75 (228)   4 (11)   12 (36)   9 (2     6   99 (200)   0 (0)   0 (1)   1 (1     7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)	2	80 (300)	8 (31)	10 (39)	2 (6)
5   75 (228)   4 (11)   12 (36)   9 (2     6   99 (200)   0 (0)   0 (1)   1 (1     7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     2	3	48 (138)	34 (98)	12 (34)	6 (18)
6   99 (200)   0 (0)   0 (1)   1 (1)     7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88	4	12 (41)	49 (178)	23 (83)	16 (59)
7   28 (128)   26 (117)   40 (185)   6 (2     8   96 (176)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91	5	75 (228)	4 (11)	12 (36)	9 (28)
8   96 (176)   0 (0)   0 (0)   4 (8     9   97 (298)   0 (0)   0 (0)   3 (8     10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (24	6	99 (200)	0 (0)	0(1)	1 (1)
9 97 (298) 0 (0) 0 (0) 3 (8 10 95 (269) 0 (0) 0 (0) 5 (1 11 54 (263) 18 (89) 26 (124) 2 (7 12 97 (352) 1 (2) 0 (0) 2 (7 13 99 (299) 0 (0) 0 (0) 1 (4 14 83 (220) 0 (1) 16 (42) 1 (2 15 17 (72) 64 (261) 13 (53) 6 (2 16 93 (556) 2 (9) 3 (18) 2 (1 17 91 (225) 5 (13) 2 (4) 2 (5 18 87 (504) 4 (24) 6 (35) 3 (1 19 98 (560) 2 (9) 0 (0) 0 (0 20 24 (103) 38 (168) 37 (166) 1 (7 21 85 (341) 12 (47) 0 (0) 3 (1 22 88 (496) 9 (50) 0 (2) 3 (1 23 91 (382) 6 (24) 0 (2) 3 (1 24 40 (245) 37 (224) 21 (128) 2 (1 25 33 (113) 10 (36) 48 (166) 9 (3 26 10 (31) 44 (143) 42 (135) 4 (1 27 57 (237) 10 (54) 29 (166) 4 (2 28 79 (269) 17 (58) 2 (6) 2 (6 29 68 (274) 14 (56) 15 (59) 3 (1	7	28 (128)	26 (117)	40 (185)	6 (29)
10   95 (269)   0 (0)   0 (0)   5 (1     11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26	8	96 (176)	0 (0)	0 (0)	4 (8)
11   54 (263)   18 (89)   26 (124)   2 (7     12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27 <td>9</td> <td>97 (298)</td> <td>0 (0)</td> <td>0 (0)</td> <td>3 (8)</td>	9	97 (298)	0 (0)	0 (0)	3 (8)
12   97 (352)   1 (2)   0 (0)   2 (7     13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28 <td>10</td> <td>95 (269)</td> <td>0 (0)</td> <td>0 (0)</td> <td>5 (13)</td>	10	95 (269)	0 (0)	0 (0)	5 (13)
13   99 (299)   0 (0)   0 (0)   1 (4     14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29 </td <td>11</td> <td>54 (263)</td> <td>18 (89)</td> <td>26 (124)</td> <td>2 (7)</td>	11	54 (263)	18 (89)	26 (124)	2 (7)
14   83 (220)   0 (1)   16 (42)   1 (2     15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	12	97 (352)	1 (2)	0 (0)	2 (7)
15   17 (72)   64 (261)   13 (53)   6 (2     16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	13	99 (299)	0 (0)	0 (0)	1 (4)
16   93 (556)   2 (9)   3 (18)   2 (1     17   91 (225)   5 (13)   2 (4)   2 (5     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	14	83 (220)	0 (1)	16 (42)	1 (2)
17   91 (225)   5 (13)   2 (4)   2 (5)     18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	15	17 (72)	64 (261)	13 (53)	6 (24)
18   87 (504)   4 (24)   6 (35)   3 (1     19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	16	93 (556)	2 (9)	3 (18)	2 (15)
19   98 (560)   2 (9)   0 (0)   0 (4     20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	17	91 (225)	5 (13)	2 (4)	2 (5)
20   24 (103)   38 (168)   37 (166)   1 (7     21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	18	87 (504)	4 (24)	6 (35)	3 (19)
21   85 (341)   12 (47)   0 (0)   3 (1     22   88 (496)   9 (50)   0 (2)   3 (1     23   91 (382)   6 (24)   0 (2)   3 (1     24   40 (245)   37 (224)   21 (128)   2 (1     25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	19	98 (560)	2 (9)	0 (0)	0 (4)
22 88 (496) 9 (50) 0 (2) 3 (1   23 91 (382) 6 (24) 0 (2) 3 (1   24 40 (245) 37 (224) 21 (128) 2 (1   25 33 (113) 10 (36) 48 (166) 9 (3   26 10 (31) 44 (143) 42 (135) 4 (1   27 57 (237) 10 (54) 29 (166) 4 (2   28 79 (269) 17 (58) 2 (6) 2 (6   29 68 (274) 14 (56) 15 (59) 3 (1	20	24 (103)	38 (168)	37 (166)	1 (7)
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25   33 (113)   10 (36)   48 (166)   9 (3     26   10 (31)   44 (143)   42 (135)   4 (1     27   57 (237)   10 (54)   29 (166)   4 (2     28   79 (269)   17 (58)   2 (6)   2 (6     29   68 (274)   14 (56)   15 (59)   3 (1	23	91 (382)	6 (24)	0 (2)	3 (12)
26 10 (31) 44 (143) 42 (135) 4 (1   27 57 (237) 10 (54) 29 (166) 4 (2   28 79 (269) 17 (58) 2 (6) 2 (6   29 68 (274) 14 (56) 15 (59) 3 (1	24	40 (245)	37 (224)	21 (128)	2 (15)
27 57 (237) 10 (54) 29 (166) 4 (2   28 79 (269) 17 (58) 2 (6) 2 (6   29 68 (274) 14 (56) 15 (59) 3 (1	25	33 (113)	10 (36)	48 (166)	9 (33)
28 79 (269) 17 (58) 2 (6) 2 (6 29 68 (274) 14 (56) 15 (59) 3 (1	26	10 (31)	44 (143)	42 (135)	4 (14)
29 68 (274) 14 (56) 15 (59) 3 (1	27	57 (237)	10 (54)	29 (166)	4 (25)
	28	79 (269)	17 (58)	2 (6)	2 (6)
30 86 (373) 0 (2) 11 (46) 3 (1	29	68 (274)	14 (56)	15 (59)	3 (13)
00 (373) 0 (2) 11 (40) 3 (1	30	86 (373)	0 (2)	11 (46)	3 (14)
All houses in city 68 (8,140) 15 (1,713) 13 (1,555) 4 (4	All houses in city	68 (8,140)	15 (1,713)	13 (1,555)	4 (436)

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

House size is only one measure of housing quality and we now move on to examine the various types of housing to be found in the city. There were three main housing types in 1917: self-contained houses (some sharing common yards); back-to-back houses and tenements. In all, over two-thirds of houses in the city were self-contained although there were substantial proportions of back-to-back and tenement dwellings to be found throughout the city. Many of the tenements were sub-divided larger properties rather than purpose-built flatted accommodation.<sup>37</sup>

However, as was the case with the size of dwelling, the distribution of different types of housing in the city was uneven. In 10 largely suburban districts more than 90 per cent of the housing stock was self-contained, whilst in five more central districts the figure was less than 30 per cent. An examination of the distribution of the poorer quality back-to-back and tenement housing shows that there were a number of districts with little or no housing of this type (Table 5). When the figures for self-contained houses are mapped it is clear that the districts with the highest levels were to be found in the suburbs on all sides of the city, most notably to the east and the south, conversely the lowest levels were to be found in the central districts where the city's oldest houses were to be found (Fig. 5).

Moving on to look at the facilities to be found in the city's housing stock, the measure used is to calculate the proportion of houses containing a fixed bath, information collected in the 1917 Housing Census. In all, 18 per cent of houses in the city were provided with a fixed bath. However, once again there were striking variations in the different parts of the city. In four suburban districts to the north and east over 60 per cent of houses were provided with this facility, whilst in five centrally-situated districts the comparable figure was two per cent or less (Table 6: Fig. 6).

District % Number **District** % Number All houses in city 18 2,149

TABLE 6. Houses with fixed bath, Carlisle, 1917.

Source: Carlisle Housing Census; C.R.O. (Carlisle) CaE9.

This examination of three main variables: house size, house type and the proportion of houses containing a fixed bath has demonstrated that there was a

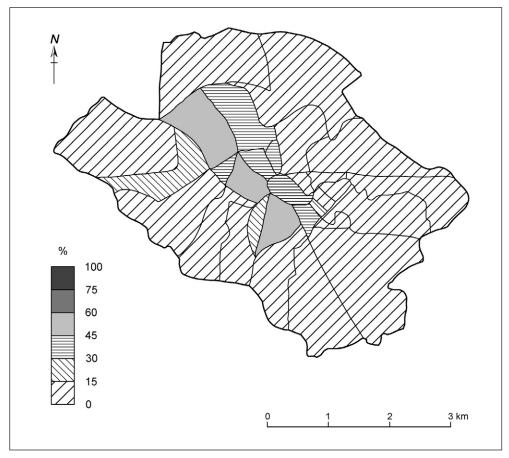


Fig. 3. Houses with one and two rooms, Carlisle, 1917.

clear and distinct spatial pattern of housing quality in Carlisle in 1917. The same suburban districts contained the greatest proportion of larger houses, self-contained houses and those with fixed baths. In contrast, the districts with the highest levels of very small houses, back-to-back and tenement dwellings and those with fewest fixed baths were in the city centre and in the oldest working-class suburbs. This clear division in the quality of the housing stock is not surprising as it reflects the pattern of urban development in the previous century described above.

Although this data on house size, house type and the proportion of houses with fixed bath can tell us a great deal about the quality of the housing stock, what these measures cannot do is tell us is whether the poorest quality housing in the city was the most overcrowded. Fortunately, the Housing Census provides us with clear evidence to examine the extent of overcrowding in the 30 districts of the city. Thus it is possible to assess the extent to which these two important measures of quality of life co-existed in housing in Carlisle in 1917. This is done by, first, examining the extent to which overcrowding varied from area to area and, second, by asking whether the poorest quality houses (back-to-back and tenements) were more likely to be overcrowded than the housing stock as a whole.



Fig. 4. Houses with five rooms or more, Carlisle, 1917.

However, before investigating levels of overcrowding, it is important to note that the population of the city of Carlisle was affected by the unusual circumstances brought about by the First World War. In 1923, the City Surveyor estimated that Carlisle's population had been increased by approximately 3,000 in 1917 due to an influx of munitions workers.<sup>38</sup> According to the Housing Census, 2,040 Carlisle residents were serving in the armed forces in 1917 and the city housed approximately 6,500 lodgers. More than half of these were female. It can be assumed that a large proportion of the lodgers were munitions workers working in factories at Gretna and Eastriggs.<sup>39</sup> Thus, the pattern of overcrowding may have been different to that in peacetime. However, an examination of the Housing Census shows that the majority of lodgers were housed in larger self-contained houses.<sup>40</sup> Thus levels of overcrowding in the smallest back-to-back and tenement houses should not be substantially affected by these unusual wartime conditions.

The first measure used to determine levels of overcrowding is to assess the number of houses in which living rooms were used as bedrooms. However, to do this effectively, it is important to set a standard for different-sized dwellings in the city. There was no standard set for the Housing Census enumerators when they

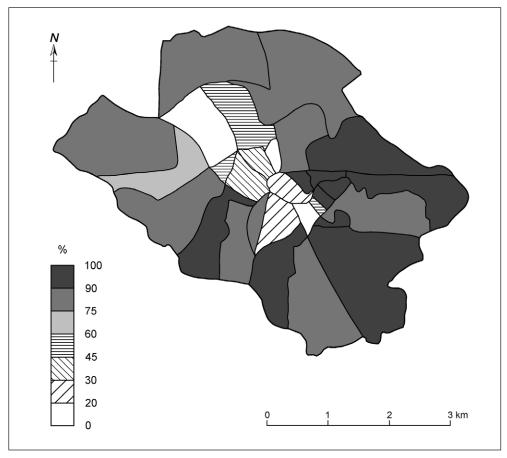


Fig. 5. Self-contained houses, Carlisle, 1917.

were completing their sheets. Thus, some two-roomed houses with seven or more inhabitants were registered as not having a living room used as a bedroom. This seems extremely unlikely. The standard decided upon for this study was to include the following as houses in which living rooms were likely to have been used as bedrooms: two-roomed houses containing four or more people, all three-roomed houses containing nine or more people and all four-roomed houses with 12 or more inhabitants.

The results show that in 15 per cent of all houses in the city living rooms were used as bedrooms in 1917 (Table 7). However, this overall figure disguises substantial variations from district to district. In seven districts the level was two per cent or less, whilst in five districts it was 30 per cent or more. The former were all situated in the suburbs to the east and south of the city, the latter were all city centre districts (Fig. 7). District 20 was the most overcrowding using this measure, with 44 per cent of all houses containing living rooms used as bedrooms. No suburban district had a figure in excess of 20 per cent. Thus, taking this measure, the city centre districts were substantially more overcrowded than the suburbs.

In order to test the reliability of these figures a further method of examining levels

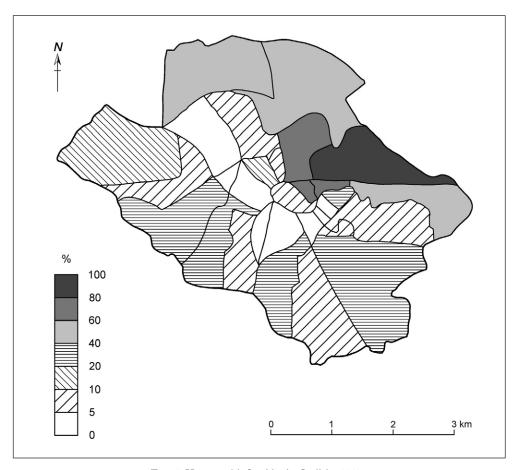


Fig. 6. Houses with fixed bath, Carlisle, 1917.

TABLE 7. Living rooms used as bedrooms, Carlisle, 1917.

District	%	Number	District	%	Number
1	12	48	16	5	30
2	8	28	17	2	5
3	20	59	18	6	33
4	32	116	19	2	13
5	8	24	20	44	194
6	0	1	21	18	72
7	35	160	22	10	54
8	1	1	23	6	20
9	1	3	24	31	190
0	1	2	25	29	100
1	22	105	26	38	123
2	4	14	27	27	155
.3	1	4	28	9	29
4	8	22	29	16	65
5	23	93	30	7	30
All houses in c	itv 15	1,793			

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

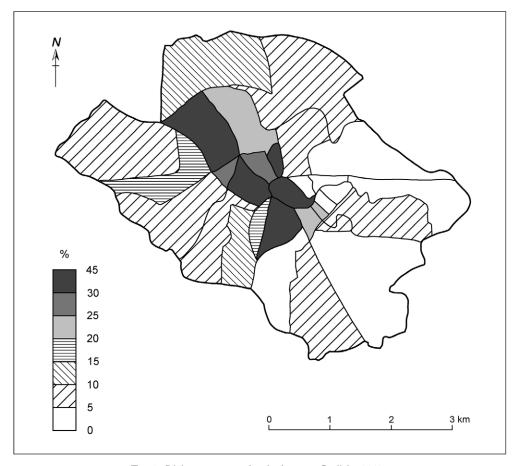


FIG. 7. Living rooms used as bedrooms, Carlisle, 1917.

TABLE 8. Houses containing two or more people per room.

No. rooms	1	2	3	4	5
Percentage of total in group	56	45	31	13	5
No. of houses	265	853	844	277	124
Percentage of total population	1.4	8.4	11.3	4.7	2.3
No. of people	752	4,512	6,069	2,524	1,235

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

of overcrowding in Carlisle was used. In this, the proportion of houses in which families lived at a density of two or more persons per room in houses containing one to five rooms was calculated. This excludes all 2,087 houses containing six or more rooms as it was assumed that these would be unlikely to have overcrowding levels using this criterion.

In total, 2,363 properties were overcrowded using this calculation, 24 per cent of all houses of this size. The houses most likely to be overcrowded were those with one and two rooms, though the largest proportion of the population living in these

conditions were in three-roomed houses (Table 8). In total over 15,000 people, 28 per cent of the city's population, lived at this density, over one-third of all those people living in houses with less than six rooms.<sup>41</sup>

A further method of assessing levels of overcrowding in the city was to calculate the number of persons per room. This was undertaken relatively easily by dividing the number of people in each dwelling by the number of rooms, information provided in the Housing Census. This showed that the average occupancy rate for Carlisle was 1.10 persons per room (Table 9). When the figures are separated out by district, a similar picture emerges to the one presented above in relation to the proportion of living rooms used as bedrooms (Table 7). The highest occupancy levels were found in five districts where the figure was above 1.40 persons per room, districts 15, 20, 21, 24 and 26, and the lowest in districts 2, 5, 6, 8 and 9, where the figure was below 0.8 persons per room (Table 9, Fig. 7). Although comparable figures are not available for 1917, the statistics for 1921 suggest that levels of overcrowding in Carlisle in 1917 were higher than the national average.<sup>42</sup>

TABLE 9. Number of people per room, Carlisle, 1917.

District	All houses	Back-to-back houses	Tenements
1	0.87	1.41	2.50
2	0.76	1.44	1.35
3	1.14	1.31	1.46
4	1.39	1.59	1.63
5	0.68	1.47	1.44
6	0.57	_	2.00
7	1.23	1.51	1.72
8	0.65	_	_
9	0.62	_	_
10	0.90	_	_
11	1.35	1.90	1.64
12	1.20	0.83	_
13	0.84	_	_
14	1.18	1.50	1.48
15	1.46	1.60	1.75
16	1.39	1.54	1.48
17	0.82	1.51	0.93
18	1.22	1.19	1.36
19	0.97	1.60	_
20	1.56	1.82	1.92
21	1.42	1.91	_
22	1.18	1.76	1.40
23	0.88	1.04	1.07
24	1.48	1.71	1.80
25	1.02	1.74	1.39
26	1.76	1.91	1.84
27	1.38	1.71	1.54
28	1.24	1.95	1.17
29	1.14	1.60	1.74
30	1.19	2.30	1.88
All houses in city	1.10	1.66	1.67

Source: Carlisle Housing Census, C.R.O. (Carlisle) CaE9.

When the analysis is broken down to look at levels of overcrowding in different types of housing, it is clear that back-to-back and tenement dwellings had significantly higher levels of overcrowding than self-contained houses, wherever they were to be found in the city (Table 9). Indeed, these rather more detailed figures demonstrate that in the small number of back-to-back and tenement houses in areas where indicators of housing quality were otherwise high, levels of overcrowding could be significant. This was true even when these dwellings were surrounded by large numbers of good quality houses with relatively low occupancy rates and is particularly noticeable in the case of district 1 (Table 9). This highlights the importance of looking beyond the average figures in predominantly middle-class districts to recognise that in all parts of the city tiny pockets of poor quality, overcrowded housing were to be found.

## Conclusion

The analysis in this paper has identified a distinct spatial pattern in terms of housing quality and levels of overcrowding in the city of Carlisle. The districts containing the largest houses, with the highest proportion of self-contained properties and the greatest proportion of houses with fixed baths were those with the lowest levels of overcrowding. In contrast, those districts with the very highest levels of overcrowding were those with the fewest self-contained houses, the smallest dwellings and the houses with the least number of fixed baths in the city. Overall, the two districts with the very poorest quality houses and the highest levels of overcrowding, districts 20 and 26, were to be found in the inner parts of Caldewgate and Denton Holme, the two suburbs identified as containing the poorest quality housing in the city by the Board of Health in its Report in 1850. It seems that little had changed in the intervening 67 years.

The paper has also shown that Carlisle's working-class housing stock was substantially smaller than the national average, with a high proportion of back-to-back and tenement dwellings. It was clear that there was much to be done in the post-war period. Armed with convincing evidence that a significant proportion of the city's population were living in unfit, overcrowded conditions, Carlisle Corporation was in a good position to put forward a detailed housing programme to the Local Government Board in 1918. Indeed, it was one of the first local authorities to do so.<sup>43</sup> The Corporation put into place the policies needed to deal with the problem in the years that followed.

The first houses built by Carlisle Corporation were completed in 1920 and in the years to 1939 almost 5,000 local authority houses were built in the city under the various government acts passed in these years. In all, local authority housing accounted for over two-thirds of the housing built in the city between 1919 and 1939.<sup>44</sup> This massive public housebuilding programme received broad support in the city.<sup>45</sup>

However, new housebuilding was only one part of the changes which were required to improve the city's housing stock: removal and closure of housing was also crucial if real improvements were to take place. In the years 1919 to 1939, over 1,000 dwellings were taken out of use.<sup>46</sup> Further closures and demolition were required after 1945, but a substantial proportion of the worst slums had been

removed in these years.

By the end of 1939 the extent of the changes which had taken place in the city were clear for all to see. Over one-third of the city's housing stock had been built in the years since 1919. Most of this building had taken place in the suburbs on green field sites, whilst almost all of the housing taken out of use was in the older city centre and industrial suburbs.<sup>47</sup> This led to a massive increase in the size of the built-up area and a major shift of population from the central areas to the suburbs.

Carlisle Corporation was justifiably proud of the part it played in the improvements which took place in these years. As early as 1924 Corporation officials were claiming that their housing achievement was impressive, compiling a list of local authorities, together with their housing records, to show the relative superiority of Carlisle. In a 1958 Corporation publication it was claimed that Carlisle's record in providing houses per head of population was the best in the country. The commitment of Carlisle Corporation to improving the city's housing in the years 1919 to 1939 had its roots in the decision to undertake the remarkable 1917 Housing Census. Even more impressive was the Corporation's willingness to act upon this evidence in the post-war period.

### **Notes and References**

- <sup>1</sup> Daunton, M. J., A Property-Owning Democracy (London, 1987), 28.
- <sup>2</sup> See for example, Swenarton, M., Homes Fit for Heroes (London, 1981), 189-90; Orbach, L. F., Homes for Heroes (London, 1977), 7; Dickens, P. & Gilbert, P., "Inter-war housing policy: a study of Brighton", Southern History (1981), 3, 207.
- <sup>3</sup> Addison, C., The Betrayal of the Slums (London, 1922), 19.
- <sup>4</sup> Census figures for 1921 show that Carlisle was the largest city north of Preston and south of Glasgow and the nearest larger urban centres were Newcastle-upon-Tyne and Gateshead to the east.
- <sup>5</sup> Board of Trade Enquiry into the cost of living of the working classes, Cd 3864 (London, 1908), 105.
- <sup>6</sup> Barnes, J., Radical Politics in Carlisle 1790-1850 (unpublished Ph.D. Thesis, Lancaster University, 1981) 8
- <sup>7</sup> For more detailed information on urban growth in the nineteenth century see Lawton, R. & Pooley, C. G., *Britain 1750-1940: an historical geography* (London, 1992); Wrigley, E. A. & Schofield, R. S., *The Population History of England, 1541-1871: a reconstruction* (London, 1981); Woods, R., *The Population of Britain in the Nineteenth Century* (London, 1992).
- <sup>8</sup> Board of Trade Enquiry, 1908, 139.
- <sup>9</sup> Smith, K., Old Towns and Cities: Carlisle (Skipton, 1984), 50.
- <sup>10</sup> Carlisle Medical Officer of Health Report, 1919.
- <sup>11</sup> Carlisle Journal, 8 October, 1803.
- <sup>12</sup> Barnes, op. cit., 26.
- <sup>13</sup> *Ibid.*, 5.
- <sup>14</sup> Board of Trade Enquiry, 1908, 140.
- <sup>15</sup> C.R.O. (Carlisle) CaE9, Carlisle Housing Census, 1917.
- <sup>16</sup> Report to the General Board of Health on the City of Carlisle (1850).
- <sup>17</sup> Barnes, op. cit., 27.
- <sup>18</sup> Messenger, P., Some aspects of the suburban growth of Carlisle, (unpublished B.Sc. Dissertation, University of Manchester, 1971), 88.
- <sup>19</sup> A useful outline of the early development of such legislation is included in Dennis, R., English Industrial Cities of the Nineteenth Century (Cambridge, 1984), Chapter 5.
- <sup>20</sup> Board of Trade Enquiry, 1908, 140.
- <sup>21</sup> Powell, C. G., An Economic History of the British Building Industry 1918-1979 (London, 1982), 69-75.
- <sup>22</sup> See for instance Butt, J., "Working-class housing in Glasgow" in S. D., Chapman, *The History of Working-Class Housing* (Newton Abbott, 1971), 55-92; Kemp, P., The transformation of the urban

- housing market in Britain (unpublished Ph.D. Thesis, University of Sussex, 1984), Chapter 1.
- <sup>23</sup> Messenger, op. cit., 78.
- <sup>24</sup> Berry, F., Housing: the great British failure (London, 1974), 114; Butt, J., op. cit., 146; Saul, S. B., "Housebuilding in England 1890-1914", Economic History Review, 15, 1962-63, 119-37.
- <sup>25</sup> Carlisle Corporation Minutes, January 1914.
- <sup>26</sup> In July 1917 the Local Government Board sent Circular 86 to all local authorities in the country asking them to make an assessment of their housing needs in the post-war period.
- <sup>27</sup> Collingwood, A. H., Housing of the Working Classes (Carlisle, 1917), 4.
- <sup>28</sup> Ibid.
- <sup>29</sup> *Ibid.*, 9.
- <sup>30</sup> An examination of the department of Housing and Local Government files for three towns of a similar size, Burnley, Oldham and Darlington, shows that they merely estimated the housing requirements of their communities, National Archives, HLG/48/172, 60, 75.
- <sup>31</sup> A more detailed analysis of the evidence collected from the Carlisle Housing Census can be found in Turnbull, J., Housing Tenure and Social Structure: the impact of inter-war housing change on Carlisle 1917-1939 (unpublished Ph.D. Thesis, Lancaster University, 1991).
- 32 Collingwood, op. cit., 9.
- 33 Burnett, J., A Social History of Housing, 1815-1985 (London, 1986), 221.
- <sup>34</sup> Messenger, op. cit., 103.
- <sup>35</sup> *Ibid.*, 52.
- <sup>36</sup> Carlisle Corporation Planning Consents, 1880-1914.
- It is perhaps surprising, considering Carlisle's close links with Scotland, that there are no records of Scottish-style tenement blocks being built in the city in the nineteenth century.
- <sup>38</sup> Carlisle Journal, 16 November 1923. The 1921 Census figures show a decrease in the population of approximately 3,000 from the 1917 Housing Census total.
- <sup>39</sup> For more information on munitions workers at Gretna and Eastriggs see Brader, C., Timbertown Girl: female munitions workers in World War I (unpublished Ph.D. Thesis, University of Warwick, 2001).
- <sup>40</sup> 6,504 lodgers were resident in Carlisle in 1917. They lived in 2,987 houses, 25 per cent of the houses in the city. However, eighty-one per cent of dwellings housing lodgers were self-contained and 67 per cent had four rooms or more. Thus lodgers were far more likely to be living in larger self-contained houses than the population overall.
- <sup>41</sup> Carlisle Housing Census, 1917.
- 42 Burnett, op. cit., 221.
- <sup>43</sup> Housing and Local Government files, HLG/48.
- <sup>44</sup> Carlisle Medical Officer of Health Reports 1919-32; Carlisle District Surveyor's Figures 1933-39.
- <sup>45</sup> After 1919 a consensus emerged within the Corporation and individual councillors no longer protested at the principle of the local authority providing houses for the working classes. Most corporation housing was built by Carlisle-based builders and the Cumberland Building Society provided funds to help fund the Corporation's subsidy housing scheme.
- 46 This figure was derived from a comparison of the 1917 Housing Census & the City Rate Books, April 1939.
- <sup>47</sup> Turnbull, op. cit., Chapters 6, 7 and 8.
- <sup>48</sup> Carlisle Corporation, The Local Government of the City and County Borough of Carlisle (Carlisle 1958), 32.