

SETTLEMENT SERVICE CLASSIFICATION

Technical Report

**SETTLEMENT INFORMATION, CLASSIFICATION AND ANALYSIS
GROUP**

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SETTLEMENT SERVICE CLASSIFICATION

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1. Background

- 1.1 The Final Report of the Inter-Departmental Urban-Rural Definition Group: Classification and Delineation of Settlements laid much emphasis on the importance of the services provided by settlements, whether urban or rural. This touches on issues such as the balance between the inconvenience of travel to services and the need to ensure an adequate catchment population; the way that outlying service sub-centres develop in larger settlements (with the attendant risk of “food deserts”) and the relationship of this to deprivation.
- 1.2 The Group recommended that a project be established to examine the sources available to establish public sector, private sector and community/voluntary sector service provision and employment availability in settlements, in order to produce an improved classification and monitoring of services.
- 1.3 This area of work has an inter-departmental aspect. It impinges on community, urban and rural development; health and personal social services, education (nursery to tertiary); transport, roads and planning; employment and cultural provision. Consequently, a working group, established under the Chairmanship of DSD by the Statistics Co-ordinating Group, carried out a scoping study on the implications of the recommendation of the Urban-Rural Definition Group, to establish the nature of departmental information needs, the available data on service location, and ways in which any identified deficit between data needs and data availability might be filled, together with the probable cost and time scale of doing so. The working group also suggested possible ways to use data available, or likely to become available, to develop an appropriate settlement classification.
- 1.4 As a consequence, the Settlements Information, Classification and Analysis Group was established to carry forwards this and other projects.
- 1.5 The terms of reference and membership of the working group are contained in Annexes 1 and 2.

2. Employment and Settlement

- 2.1 The Inter-Departmental Business Register (IDBR) is held by the Office for National Statistics (ONS) in Newport. The IDBR contains information on the type, location and employment of all VAT or PAYE registered business units in NI. The type of business is based on the 2003 Standard Industrial Classification (SIC) and Annex 3 contains details of the way in which SIC headings have been grouped together for purposes of analysis into 35 categories and 6 groupings. Location can be derived from postcodes.
- 2.2 On completion of the appropriate confidentiality undertakings, ONS provided a dump of the data, and the 83,055 records were recoded, allowing computation of totals for individual settlements. There were 1,155 records where the postcode could not be assigned to an area

when the postcode directory was applied to the data. There were 749,854 jobs covered by the coded local units.

- 2.3 In line with ONS disclosure rules, the number of establishments shown in cells of tables within this report has been rounded to the nearest 5, and employment counts based on 20 or fewer establishments have been suppressed. Averages and rates have been rounded. All calculations and classifications were, however, based on the actual figures.
- 2.4 Table 1 shows the distribution of local units and employment between the settlement bands. Larger units (average 11.9 – 14.6.1 employed per unit) are found in Medium Towns and larger, with a substantial drop in the size of units in smaller settlements (average 6.1 – 8.2 employed per unit). The average in the countryside was 4.3 persons per unit.
- 2.5 It should also be noted that the employment recorded by the IDBR is strictly a count of employee jobs and working proprietors, rather than of persons in employment. In some cases one person may hold more than one employee job. The IDBR is a live register, updated in the main part by the Census of Employment. At the time of extraction, employment related mostly to the 2003 Census of Employment with updates relating mainly to openings and closures. There are issues of timing, definition and recording which make comparison of the IDBR count with the count from the 2001 Census of Population difficult. A comparison of the proportion of employees resident in the various settlement bands with the proportion of employed persons working in these settlements, demonstrates the extent of commuting.
- 2.6 The Belfast Metropolitan Urban Area (BMUA) contains about 25% of resident employed persons, but 40% of jobs. Derry, Large Towns and Medium Towns also contain more jobs than employees, with the result that urban area in aggregate contain 76% of employed jobs, but only 63% of resident employed
- 2.7 Accordingly, a minimum of 13% of employed persons (about 86,000 persons) commute outside their own settlement band to work. These are net figures and capture neither counter flows nor flows between settlements of similar type.
- 2.8 Table 2 shows an analysis of the IDBR data for specific types of business. Some 65% of the population of NI lives in urban settlements (Small Town or larger) but 77% of food shops and 86% of banks are located in urban settlements, with 85% of all service employment being located in urban settlements. This gives some indication of the extent of movement required to obtain services. On the conservative assumption that the rural service facilities have comparable capacity to the urban facilities, 12 – 20% of the population (depending on the service) must travel to urban settlements to obtain services. This is between 44% and 74% of the rural population.
- 2.9 In analysing the level of service provision in settlements, Band H settlements were excluded on the basis that the data on this band referred only to aggregates of settlements. Belfast Metropolitan Urban Area and Derry (Bands A and B) were also excluded on the basis that these are massively larger than any other individual settlement (and the BMUA is bigger than all the other urban settlements in aggregate).

- 2.10 A technique frequently used in classification is cluster analysis. This statistical technique does not necessarily refer to geographical clustering, but rather seeks to establish the relative similarity of individual cases (in this instance, settlements) in respect of a number of appropriate variables. Cases which are deemed sufficiently similar, taking account of all the variables at the same time, are allocated to the same cluster. The intention was to classify settlements according to the type and size of services that they possessed.
- 2.11 The K means cluster facility of the statistical package SPSS was used to analyse settlements in the remaining five bands (C-G) into first five and then six clusters on the basis of number of people employed in service establishments (excluding Public Administration, Health and Education) classified as shops, as personal and motor establishments and as commercial. This encountered a problem in that SPSS allocated Craigavon, Ballymena and Newry each to a cluster of its own, a classification that had clear justification on the basis of the number and type of establishments. In population terms, Craigavon is bigger than the next two biggest settlements combined. The results of the six cluster analysis are shown in Tables 3 and 4.
- 2.12 A six cluster analysis, excluding Craigavon, Newry and Ballymena produced some further modification, at the Small Town level, but there was no distinction introduced between the Intermediate Settlement and Large Village levels (Bands F and G)
- 2.13 Accordingly, an eight cluster analysis was undertaken, with Craigavon, Newry and Ballymena excluded.
- 2.14 As shown in Tables 5 and 6, the other clusters do not correspond exactly to the Settlement Bands. In the following discussion, number of shops is used as a surrogate for services generally¹. Enniskillen (a Medium Town) was grouped with Newtownards and Omagh (Large Towns) as settlements with an average of 200 shops. By contrast, the Large Towns of Antrim and Larne were grouped with Medium Towns as settlements with an average of about 120-130 shops. Small towns were divided between three groups: Ballyclare, Ballymoney and Magherafelt (about 85 shops); Newcastle, Portrush and Portstewart (about 50 shops,) and others (about 35 shops). Some Intermediate Settlements (Hillsborough, Lisnaskea, Maghera, Moira, and Saintfield) and Large Villages (Markethill and Templepatrick) were associated with the latter.
- 2.15 Tables 7 and 8 attempt to combine the above findings into seven service bandings. Craigavon is retained as a separate banding, and Ballymena and Newry is combined into another with about 320 shops. This is substantially larger than the next bands (220 shops and 120 shops respectively). The majority of Small Towns were grouped with five well-served Intermediate Settlements (two close to Belfast and three in the west) and two Large Villages. The average number of shops was about thirty-five to fifty). The remaining seventeen Intermediate Settlements (the majority with a dormitory function) were grouped with Large Villages as settlements with an average of about ten shops. Table 9 gives details for each settlement.

¹ Personal and commercial services were also included in the cluster analysis. Number of shops (rather than retail employment) is however probably the most obvious characteristic of a settlement's Central Business District.

- 2.16 This classification based purely on statistical analysis of service provision appears to accord well with an intuitive appreciation of the status of the various settlements, but it by no means converges with a population-based classification. Antrim and Larne (with about 120-130 shops each) are radically underserved for their population of 18-20,000, compared with Enniskillen (185 shops and 14,000 population), Ballymoney (80 shops and 9,000 population) and Magherafelt (100 shops and 8,400 population).
- 2.17 More seriously, the category of Intermediate Settlement (population 2,250-4,500) divides between those comparable to small towns (26-39 shops, and population 3,000- 3,700) and those comparable to villages (6-29 shops and population 2,500-4,300). Of the seventeen settlements comparable to villages in terms of facilities provided, over half seem have a dormitory function (Ahoghill, Ballygowan, Broughshane, Crumlin, Cullybackey, Eglinton, Killyleagh, Rostrevor, Waringstown, Whitehead).
- 2.18 Appendices A, B and C examine the status of settlements as centres of service and employment provision, identifying those which provide more services than their population would appear to justify. Table 10 summarises this, showing that there are 39 settlements which serve as particular shopping centres, but only 19-24 which act as centres for employment and public administration/ health/education services.
- 2.19 Belfast and Derry serve as centres for all three categories of service. The Large and Medium Towns mostly act as centres for all three categories of service, the exceptions being Newtownards, Larne, Banbridge, Cookstown, Strabane and Limavady, which are either shopping centres only or shopping centres and employment centres (six out of sixteen). The only other settlements serving as centres for all three categories are Magherafelt, Lisnaskea and Irvinestown.
- 2.20 Appendix D examines in more detail the facilities which are available in various types of settlement, using the basic A-H population banding. Medium towns (Band D) and larger do not in general lack any of the identified facilities save perhaps a railway station and museum. Small villages etc are grouped by district council, and hence cannot be analysed individually.
- 2.21 Large villages (population 1,000-2,250) tend to have three or four food shops, a pharmacy and about four cafes, takeaways and bars. About half have a bank or building society and some staffed sports facilities. They have two or three primary/pre-primary educational establishments and about two thirds have a secondary establishment. Around two thirds have some kind of medical centre, and about a third have a dentist.
- 2.22 By contrast, small towns (population 4,500-10,000) are likely to have 12-13 food shops (including two or three supermarkets), three or four pharmacies, and two or three electrical goods shops. There also likely to be three banks or building societies, three or four staffed sports facilities, six or seven clothes shops and over twenty cafes, takeaways and bars. The great majority have a staffed bus station. There are likely to be about seven primary/pre-primary educational establishments, with four or five secondary establishments and two-thirds having a higher educational establishment. Small towns are likely to have a couple of

medical establishments and two or three dentists, as well as a 40% chance of a hospital of some kind.

- 2.23 Appendix E establishes a rating for settlements, based on the presence or absence of facilities in each of the seven categories: Education, Retail, Health, Transport, Social, Financial and Government. Each of the categories is assessed separately, and the lowest rating of all the categories determines the overall rating of the settlement. There were in total, 30 settlements receiving a rating of 3 or more. No main settlements in Clusters 1-7 had a rating below 3, and of the 82 settlements in Clusters 8 and 9, only five (Ballycastle, Kilkeel, Lisnaskea, Newcastle, Portrush) received a rating of 3 or more.
- 2.24 A rating of 3 implies that the settlement lacks at least one of: a FE institute, University, electrical store, hospital, library or museum. Other facilities considered are present. It thus has a secondary school, supermarket, clothes shop, health centre, dentist, optician, pharmacy, bus station, sports facility, bank and government office.
- 2.25 The relationship between service provision and population is stronger if it is corrected to take account of the effect of commuting by workers (Appendix F). When the effect of population is removed, it is clear that there is a relationship between the various retail services and between the various public sector services, but this is not reflected in the relationship between retail and public sector services (Appendix G).
- 2.26 Appendix H suggests that the accessibility of a settlement by bus is linked primarily to its population and then to its public sector and high order retail facilities, such as schools, hospitals, banks and electrical goods, rather than to facilities such as food shops, clothing shops, pharmacies and supermarkets. Conversely, settlements with small population and fewer high order facilities are less accessible. If their lower order facilities cease to be available, the residents dependent on public transport will experience problems in accessing a similar service elsewhere .
- 2.27 Appendix I demonstrates that charities are more concentrated in their location than banks, and community organisations are more dispersed than food shops. There are far more community organisations per capita population in Derry than in the Belfast Metropolitan Area. It is clear that organisations in the voluntary and community sector cannot simply be treated in the aggregate, and that the explanation for their distribution is related to more than just convenience of access.

3. Conclusions

- 3.1 The analyses of the data converge towards the conclusion that a population-based classification should be supplemented with a sub-classification based on employment and services, as shown in Table 9. Such an approach recognises that Enniskillen has more services than its population might suggest, whilst Antrim and Larne have less.
- 3.2 At a lower level, Intermediate Settlements can be divided into those with a level of services comparable with small towns (eg Lisnaskea, Maghera) and those with a level of services

comparable with villages (eg Ballygowan, Crumlin). The presence of a dormitory function can be important here.

- 3.3 It is also possible to identify settlements such as Irvinestown and Garvagh which have some degree of local importance, although this does not justify their reclassification.
- 3.4 Whilst voluntary groups conform broadly to the pattern of Belfast, urban and eastern pre-eminence, community groups are clearly less influenced by this.

Table 1 Analysis of Local Units and Employment	Local Units (to nearest 5)	Employed	Employed per Unit (to nearest .05)	Employed Resident (Census)	% of Units	% of Employed	% of Employed Resident	Ratio Employed: Resident
BMUA	20,675	301,881	14.60	223,212	25.24	40.26	33.72	1.194
Derry	2,805	38,308	13.65	29,109	3.42	5.11	4.40	1.162
Large Towns	9,735	132,156	13.60	88,553	11.89	17.62	13.38	1.318
Medium Towns	4,865	58,102	11.95	37,419	5.94	7.75	5.65	1.371
Small Towns	4,380	35,955	8.20	40,191	5.35	4.79	6.07	0.790
Intermediate Villages	2,475	17,707	7.15	26,942	3.02	2.36	4.07	0.580
Countryside	2,995	18,245	6.10	26,921	3.66	2.43	4.07	0.598
NI	33,970	147,500	4.35	189,676	41.48	19.67	28.65	0.687
	81,900	749,854	9.15	662,022	100.00	100.00	100.00	1.000
Urban	42,460	566,402	13.35	418,483	51.84	75.53	63.21	1.195
Rural	39,440	183,452	4.65	243,539	48.16	24.47	36.79	0.665
Large Town and larger	33,210	472,345	14.20	340,873	40.55	62.99	51.49	1.223
Medium Town and smaller	48,690	277,509	5.70	321,149	59.45	37.01	48.51	0.763

Table 2 Analysis of Services

	Super-market/ Food	Bank/ Building Society	% Food	% Bank	Population	% Pop	Ratio Food: Population	Service Employ- ment	% Service Employ- ment
BMUA	1,030	175	32.21	41.08	579,554	34.34	0.938	266,648	47.05
Derry	160	15	5.00	3.99	90,736	5.38	0.930	32,913	5.66
Large Towns	550	85	17.26	19.48	223,884	13.27	1.301	106,689	18.75
Medium Towns	290	40	8.97	9.86	100,625	5.96	1.505	48,607	8.05
Small Towns	240	45	7.50	10.56	101,817	6.03	1.244	28,760	4.60
Intermediate Villages	170	25	5.38	5.40	65,006	3.85	1.396	12,554	2.41
Countryside	205	25	6.35	5.40	68,008	4.03	1.575	13,206	2.05
NI	555	20	17.32	4.23	457,880	27.13	0.638	72,899	11.43
	3,200	425	100.00	100.00	1,687,510	100.00	1.000	582,281	100.00
Urban	2,270	360	70.95	84.98	1,096,616	64.98	1.092	483,617	83.06
Rural	930	65	29.05	15.02	590,894	35.02	0.830	98,659	16.94
Large Town and larger	1,740	275	54.47	64.55	894,174	52.99	1.028	406,250	69.77
Medium Town and smaller	1,455	150	45.53	35.45	793,336	47.01	0.968	176,026	30.23

Table 3 6 Cluster analysis of Settlements in Settlement bands C-G using numbers employed in shops, personal service and motor establishments, commercial establishments

Characteristics of Settlement Clusters in Bands C-G

Mean (rounded to nearest one)

Shop, Personal, Commercial 6 way cluster Cluster & Name or number of settlements	Mean Population	Mean Number of Shop Establishments	Mean Number of Personal & Motor Establishments	Mean Number of Commercial Establishments
1 Newry	27433	315*	500*	235*
2 Craigavon	57685	485*	700*	315*
3 80 settlements	2436	15	28	14
4 12 Settlements	11216	95	155	68
5 Ballymena	28717	333	408	179
6 6 settlements	19344	180	273	146
Total	5538	45	72	35

* To nearest 5

Table 4 Allocation of C-G Settlements to 6 Clusters

Settlement Cluster	Settlement Band	Settlements
1	C	Newry
2	C	Craigavon
3	E-G	All settlements not elsewhere mentioned
4	C	Larne
	D	Armagh, Banbridge, Downpatrick, Dungannon, Limavady, Strabane
	E	Ballyclare, Ballymoney, Portrush, Magherafelt, Newcastle
5	C	Ballymena
6	C	Antrim, Coleraine, Newtownards, Omagh
	D	Enniskillen, Cookstown

Table 5 8Cluster analysis of Settlements in Settlement bands C-G using numbers employed in shops, personal service and motor establishments, commercial establishments (Craigavon, Newry and Ballymena excluded)

Characteristics of Settlement Clusters in Bands C-G

Mean (rounded to nearest 1, or 5 for groups containing one case)

Shop, Personal, Commercial 8 way cluster Cluster and number of settlements	Mean Population	Mean Number of Shop Establishments	Mean Number of Personal & Motor Establishment	Mean Number of Commercial Establishments
1 (3)	20443	202	160	303
2 (63)	1804	10	9	18
3 (16)	4586	33	31	60
4 (2)	15324	118	109	192
5 (3)	7206	48	33	105
6 (4)	14675	132	98	211
7 (6)	10345	84	61	131
8 (1)	24089	240*	175*	350*
Total (98)	4546	35	29	58

* Rounded to nearest 5

Table 6 Allocation of C-G settlements to 8 clusters

Settlement Cluster	Settlement Band	Settlements
1	C	Newtownards, Omagh
	D	Enniskillen
2	F-G	Settlements not elsewhere mentioned
3	E	Ballycastle, Ballynahinch, Coalisland, Comber, Donaghadee, Dromore, Kilkeel, Randalstown, Warrenpoint
	F	Hillsborough, Lisnaskea, Maghera, Moira, Saintfield
	G	Markethill, Templepatrick
4	C	Antrim
	D	Cookstown
5	E	Newcastle, Portrush, Portstewart
6	C	Larne
	D	Armagh, Banbridge, Dungannon
7	D	Downpatrick, Limavady, Strabane
	E	Ballyclare, Ballymoney, Magherafelt
8	C	Coleraine

Table 7 Combined Service Banding, based on 6 and 8 way clusters

**Characteristics of Settlement Clusters in Bands C-G
(Mean to nearest 1, or 5 of groups containing one case)**

Shop, Personal, Commercial Combined 6 and 8 way cluster Name or 8 way cluster (see Table 5) & number of settlements	Service Banding	Mean Population	Mean Number of Shop Establishments	Mean Number of Personal & Motor Establishments	Mean Number of Commercial Establishments
Craigavon	3	57685	485*	700*	315*
Ballymena	4	28717	335*	410*	180*
Newry	4	27433	315*	500*	235*
8 (1)	5	24089	240*	175*	350*
1 (3)	5	20443	202	160	303
6 (4)	6	14675	132	98	211
4 (2)	6	15324	118	109	192
7 (6)	7	10345	84	61	131
5 (3)	8	7206	48	33	105
3 (16)	8	4586	33	31	60
2 (63)	9	1804	10	9	18

* Cell rounded to nearest 5

Table 8 Settlements in Service Banding

Service Banding	Settlement Band	Settlements
3	C	Craigavon
4	C	Ballymena, Newry
5	C	Coleraine , Newtownards, Omagh
	D	Enniskillen
6	C	Antrim, Larne
	D	Armagh, Banbridge, Cookstown, Dungannon
7	D	Downpatrick, Limavady, Strabane
	E	Ballyclare, Ballymoney, Magherafelt
8	E	Ballycastle, Ballynahinch, Coalisland, Comber, Donaghadee, Dromore, Kilkeel, Newcastle, Portrush, Portstewart, Randalstown, Warrenpoint
	F	Hillsborough, Lisnaskea, Maghera, Moira, Saintfield
	G	Markethill, Templepatrick
9	F-G	Settlements not elsewhere mentioned

Table 9 Proposed allocation to Service Banding

Zone	Settlement Band	Service Band	Composite Banding		SETTLEMENT	Population	Shops (to nearest 5)
E	A	1	A1		BMUA	579,554	3,260
W	B	2	B2		DUA	90,736	505
E	C	3	C3		CUA	57,685	485
E	C	4	C4		BALLYMENA	28,717	335
W	C	4	C4		NEWRY	27,433	315
W	C	5	C5		COLERAINE	24,089	240
E	C	5	C5		NEWTOWNARDS	27,821	235
W	C	5	C5		OMAGH	19,910	185
E	C	6	C6		ANTRIM	20,001	115
E	C	6	C6		LARNE	18,228	130
W	D	5	D5		ENNISKILLEN	13,599	185
W	D	6	D6		ARMAGH CITY	14,590	140
E	D	6	D6		BANBRIDGE	14,744	115
W	D	6	D6		COOKSTOWN	10,646	120
W	D	6	D6		DUNGANNON	11,139	140
E	D	7	D7		DOWNPATRICK	10,316	80
W	D	7	D7		LIMAVADY	12,135	80
W	D	7	D7		STRABANE	13,456	100
E	E	7	E7		BALLYCLARE	8,770	60
W	E	7	E7		BALLYMONEY	9,021	80
W	E	7	E7		MAGHERAFELT	8,372	100
W	E	8	E8		BALLYCASTLE	5,089	40
E	E	8	E8		BALLYNAHINCH	5,364	50
W	E	8	E8		COALISLAND	4,917	30
E	E	8	E8		COMBER	8,933	35
E	E	8	E8		DONAGHADEE	6,470	30
E	E	8	E8		DROMORE	4,968	30
W	E	8	E8		KILKEEL	6,338	60
E	E	8	E8		NEWCASTLE	7,444	75
W	E	8	E8		PORTRUSH	6,372	35
W	E	8	E8		PORTSTEWART	7,803	35
E	E	8	E8		RANDALSTOWN	4,956	30
W	E	8	E8		WARRENPOINT	7,000	45
E	F	8	F8		HILLSBOROUGH	3,400	30
W	F	8	F8		LISNASKEA	2,739	30
W	F	8	F8		MAGHERA	3,711	40
E	F	8	F8		MOIRA	3,682	35
E	F	8	F8		SAINTFIELD	2,959	25
E	F	9	F9		AHOGHILL	3,055	10
E	F	9	F9		BALLYGOWAN	2,671	10
E	F	9	F9		BROUGHSHANE	2,364	15
W	F	9	F9		CASTLEDERG	2,758	30
E	F	9	F9		CASTLEWELLAN	2,392	20
E	F	9	F9		CRUMLIN	4,259	20

Zone	Settlement Band	Service Band	Composite Banding		SETTLEMENT	Population	Shops (to nearest 5)
E	F	9	F9		CULLYBACKEY	2,405	15
W	F	9	F9		DUNGIVEN	2,993	10
W	F	9	F9		EGLINTON	3,165	10
W	F	9	F9		KEADY	2,960	25
E	F	9	F9		KILLYLEAGH	2,483	15
E	F	9	F9		PORTAFERRY	2,467	15
W	F	9	F9		RICHHILL	2,818	10
W	F	9	F9		ROSTREVOR	2,444	10
W	F	9	F9		TANDRAGEE	3,050	20
E	F	9	F9		WARINGSTOWN	2,529	5
E	F	9	F9		WHITEHEAD	3,702	15
W	G	8	G8		MARKETHILL	1,292	20
E	G	8	G8		TEMPLEPATRICK	1,556	5
E	G	9	G9		ANNAHILT	1,148	5
W	G	9	G9		ANNALONG	1,778	5
E	G	9	G9		ARDGLASS	1,668	15
W	G	9	G9		BALLINAMALLARD	1,340	10
W	G	9	G9		BALLYKELLY	1,836	10
E	G	9	G9		BALLYWALTER	1,416	5
W	G	9	G9		BELLAGHY	1,063	5
W	G	9	G9		BUSHMILLS	1,319	15
E	G	9	G9		CARNLOUGH	1,444	10
W	G	9	G9		CASTLEDAWSON	2,089	10
W	G	9	G9		CASTLEROCK	1,336	10
W	G	9	G9		CLAUDY	1,316	5
W	G	9	G9		CLOUGHMILLS	1,240	10
E	G	9	G9		COGRY/KILBRIDE	1,195	5
E	G	9	G9		CROSSGAR	1,539	15
W	G	9	G9		CROSSMAGLEN	1,459	15
W	G	9	G9		CUSHENDALL	1,241	10
E	G	9	G9		DOAGH	1,130	5
E	G	9	G9		DOLLINGSTOWN	1,844	5
W	G	9	G9		DRAPERSTOWN	1,638	20
W	G	9	G9		DROMORE_OMAGH	1,101	10
E	G	9	G9		DRUMANESS	1,280	5
E	G	9	G9		DUNDRUM	1,065	5

Zone	Settlement Band	Service Band	Composite Banding		SETTLEMENT	Population	Shops (to nearest 5)
W	G	9	G9		DUNLOY	1,071	5
W	G	9	G9		FINTONA	1,359	15
W	G	9	G9		FIVEMILETOWN	1,108	5
W	G	9	G9		GARVAGH	1,288	10
E	G	9	G9		GILFORD	1,573	10
E	G	9	G9		GLENAVY	1,069	5
E	G	9	G9		GREYABBEY	1,011	5
W	G	9	G9		GREYSTEEL	1,229	5
W	G	9	G9		IRVINESTOWN	1,801	30
E	G	9	G9		KELLS/CONNOR	1,745	10
W	G	9	G9		KILREA	1,513	15
E	G	9	G9		KIRCUBBIN	1,214	5
W	G	9	G9		LISBELLAW	1,046	5
E	G	9	G9		MAGHABERRY	1,696	5
E	G	9	G9		MAGHERALIN	1,144	5
E	G	9	G9		MILLISLE	1,800	5
W	G	9	G9		MONEYMORE	1,369	5
W	G	9	G9		MOY	1,218	15
W	G	9	G9		NEWTOWNSTEWART	1,479	10
E	G	9	G9		PORTAVOGIE	1,594	15
E	G	9	G9		PORTGLENONE	1,219	20
E	G	9	G9		RATHFRILAND	2,079	25
W	G	9	G9		SION MILLS	2,050	5
E	H	10	H10		BAND H (ANTRIM LGD)	17,594	50
E	H	10	H10		BAND H (ARDS LGD)	16,799	55
W	H	10	H10		BAND H (ARMAGH LGD)	29,700	85
E	H	10	H10		BAND H (BALLYMENA LGD)	19,105	45
W	H	10	H10		BAND H (BALLYMONEY LGD)	15,562	40
E	H	10	H10		BAND H (BANBRIDGE LGD)	18,028	40
E	H	10	H10		BAND H (BELFAST LGD)	932	5
E	H	10	H10		BAND H (CARRICKFERGUS LGD)	6,756	5
E	H	10	H10		BAND H (CASTLEREAGH LGD)	4,903	15
W	H	10	H10		BAND H (COLERAINE LGD)	13,914	40
W	H	10	H10		BAND H (COOKSTOWN LGD)	20,566	65
E	H	10	H10		BAND H (CRAIGAVON LGD)	18,613	45

Zone	Settlement Band	Service Band	Composite Banding	SETTLEMENT	Population	Shops (to nearest 5)
W	H	10	H10	BAND H (DERRY LGD)	9,849	45
E	H	10	H10	BAND H (DOWN LGD)	27,318	55
W	H	10	H10	BAND H (DUNGANNON LGD)	29,353	135
W	H	10	H10	BAND H (FERMANAGH LGD)	37,002	150
E	H	10	H10	BAND H (LARNE LGD)	11,160	25
W	H	10	H10	BAND H (LIMAVADY LGD)	16,229	40
E	H	10	H10	BAND H (LISBURN LGD)	24,873	85
W	H	10	H10	BAND H (MAGHERAFELT LGD)	22,907	55
W	H	10	H10	BAND H (MOYLE LGD)	8,284	15
W	H	10	H10	BAND H (NEWRY AND MOURNE LGD)	40,606	130
E	H	10	H10	BAND H (NEWTOWNABBEY LGD)	1,794	15
E	H	10	H10	BAND H (NORTH DOWN LGD)	1,946	15
W	H	10	H10	BAND H (OMAGH LGD)	25,582	80
W	H	10	H10	BAND H (STRABANE LGD)	18,505	50

Any number of shops less than 5 is counted as 5

Table 10 Service and Employment Centres

Zone	Settlement Band	SETTLEMENT	Employment Centre	Retail Centre	PAHE Centre	Population
E	A	BMUA	Yes	Yes	Yes	579,554
W	B	DUA		Yes	Yes	90,736
E	C	ANTRIM	Yes	Yes	Yes	20,001
E	C	BALLYMENA	Yes	Yes	Yes	28,717
W	C	COLERAINE	Yes	Yes	Yes	24,089
E	C	CUA	Yes	Yes		57,685
E	C	LARNE		Yes		18,228
W	C	NEWRY	Yes	Yes	Yes	27,433
E	C	NEWTOWNARDS		Yes		27,821
W	C	OMAGH	Yes	Yes	Yes	19,910
W	D	ARMAGH CITY	Yes	Yes	Yes	14,590
E	D	BANBRIDGE		Yes		14,744
W	D	COOKSTOWN	Yes	Yes		10,646
E	D	DOWNPATRICK	Yes	Yes	Yes	10,316
W	D	DUNGANNON	Yes	Yes	Yes	11,139
W	D	ENNISKILLEN	Yes	Yes	Yes	13,599
W	D	LIMAVADY		Yes	Yes	12,135
W	D	STRABANE		Yes		13,456
W	E	BALLYCASTLE		Yes		5,089
E	E	BALLYCLARE		Yes		8,770
W	E	BALLYMONEY	Yes	Yes	Yes	9,021
E	E	BALLYNAHINCH				5,364
W	E	COALISLAND				4,917
E	E	COMBER				8,933
E	E	DONAGHADEE				6,470
E	E	DROMORE				4,968
W	E	KILKEEL	Yes	Yes		6,338
W	E	MAGHERAFELT	Yes	Yes	Yes	8,372
E	E	NEWCASTLE				7,444
W	E	PORTRUSH				6,372
W	E	PORTSTEWART				7,803
E	E	RANDALSTOWN				4,956
W	E	WARRENPOINT				7,000
E	F	AHOGHILL				3,055
E	F	BALLYGOWAN				2,671
E	F	BROUGHSHANE				2,364
W	F	CASTLEDERG		Yes		2,758
E	F	CASTLEWELLAN				2,392
E	F	CRUMLIN				4,259
E	F	CULLYBACKEY				2,405
W	F	DUNGIVEN				2,993
W	F	EGLINTON				3,165
E	F	HILLSBOROUGH	Yes			3,400
W	F	KEADY		Yes		2,960
E	F	KILLYLEAGH				2,483
W	F	LISNASKEA	Yes	Yes	Yes	2,739
W	F	MAGHERA	Yes	Yes		3,711
E	F	MOIRA		Yes		3,682

Zone	Settlement Band	SETTLEMENT	Employment Centre	Retail Centre	PAHE Centre	Population
E	F	PORTAFERRY				2,467
W	F	RICHHILL				2,818
W	F	ROSTREVOR				2,444
E	F	SAINTFIELD				2,959
W	F	TANDRAGEE				3,050
E	F	WARINGSTOWN				2,529
E	F	WHITEHEAD				3,702
E	G	ANNAHILT				1,148
W	G	ANNALONG				1,778
E	G	ARDGLASS				1,668
W	G	BALLINAMALLARD				1,340
W	G	BALLYKELLY			Yes	1,836
E	G	BALLYWALTER				1,416
W	G	BELLAGHY				1,063
W	G	BUSHMILLS	Yes	Yes		1,319
E	G	CARNLOUGH				1,444
W	G	CASTLEDAWSON				2,089
W	G	CASTLEROCK				1,336
W	G	CLAUDY				1,316
W	G	CLOUGHMILLS				1,240
E	G	COGRY/KILBRIDE				1,195
E	G	CROSSGAR				1,539
W	G	CROSSMAGLEN				1,459
W	G	CUSHENDALL		Yes		1,241
E	G	DOAGH				1,130
E	G	DOLLINGSTOWN				1,844
W	G	DRAPERSTOWN	Yes	Yes		1,638
W	G	DROMORE_OMAGH		Yes		1,101
E	G	DRUMANESS				1,280
E	G	DUNDRUM				1,065
W	G	DUNLOY				1,071
W	G	FINTONA				1,359
W	G	FIVEMILETOWN				1,108
W	G	GARVAGH			Yes	1,288
E	G	GILFORD				1,573
E	G	GLENAVY				1,069
E	G	GREYABBEY				1,011
W	G	GREYSTEEL				1,229
W	G	IRVINESTOWN	Yes	Yes	Yes	1,801
E	G	KELLS/CONNOR				1,745
W	G	KILREA		Yes		1,513
E	G	KIRCUBBIN		Yes		1,214
W	G	LISBELLAW				1,046
E	G	MAGHABERRY				1,696
E	G	MAGHERALIN				1,144
W	G	MARKETHILL	Yes	Yes		1,292
E	G	MILLISLE				1,800
W	G	MONEYMORE				1,369
W	G	MOY	Yes	Yes		1,218

Zone	Settlement Band	SETTLEMENT	Employment Centre	Retail Centre	PAHE Centre	Population
W	G	NEWTOWNSTEWART				1,479
E	G	PORTAVOGIE				1,594
E	G	PORTGLENONE		Yes		1,219
E	G	RATHFRILAND		Yes		2,079
W	G	SION MILLS				2,050
E	G	TEMPLEPATRICK				1,556

Terms of reference for Settlements Information, Classification and Analysis Group

1. The Settlements Information, Classification and Analysis Group (SICAG) will identify, in ongoing consultation with government departments and other interested parties, needs for the collection, extension and development of information on the nature, structure and functioning of settlements within Northern Ireland.
2. SICAG will report annually to the Statistical Co-ordinating Group (SCG) on the results of these consultations and make recommendations through SCG to relevant departments on measures to meet identified needs in such a way that data are available which meet the criteria that they are:
 - a. conceptually clear, coherent and appropriate in theory;
 - b. relevant to current and developing government policy;
 - c. operationally applicable in practice; and
 - d. appropriate to Northern Ireland, taking account of developments elsewhere in the British Isles and EU
3. SICAG will make annual recommendations to the Statistical Co-ordinating Group on a ongoing programme of work, to be carried out by inter-departmental working groups and managed by SICAG, to meet identified needs for the collection, extension and development of information on the nature, structure and functioning of settlements within Northern Ireland.
4. In making these recommendations, SICAG will take account of the criteria listed in paragraph 2. It will also, in the first instance, take particular account of the recommendations of the Urban-Rural Definition Group concerning the need for work on service provision and on access to services, and of the fact that a considerable volume of 2001 Census data is now available for desk research into the characteristics of Northern Ireland settlements.
5. SICAG will implement the programme of work agreed with the Statistical Co-ordinating Group, after consideration of the recommendations of paragraph 3, and report back on the results and findings. It will also make comments and recommendations concerning any wider issues which may arise as a consequence of these results and findings or of the implementation of the work programme.
6. Taking account of the results, finding and recommendations arising from the work programme, and data available from other sources, SICAG will make recommendations as appropriate to SCG on revisions and developments to the classification system established by the Urban-Rural Definition Group, and to the classification of individual settlements.

Annex 2
Membership of SICAG

Departmental Representative	Department
Chris Morris (Chair)	DSD
Angus Kerr	DoE
James McEldowney	DARD
Nicola McEvoy	DETI
Uel McMath	NISRA
Malcolm Megaw	DARD
Rodney Redmond	DRD

Annex 3

Classification of local business units on Inter-departmental Business Register

SIC CLASSIFICATION	DESCRIPTION	GROUPING assigned
A – C	Agriculture Hunting & Forestry; Fishing; Mining & Quarrying	Other
D	Manufacturing	Other
E	Electricity, Gas & Water	Other
F	Construction	Other
G 50.1	Sale of motor vehicles	Personal & Motor
G 50.5	Sale of motor fuel	Personal & Motor
G 50 (other than G 50.1 and G 50.5)	Other motor vehicle trade	Personal & Motor
G 51	Wholesale trade	Commercial
G 52.1	Non-specialised shops	Retail
G 52.2	Food shops	Retail
G 52.3	Pharmacies	Retail
G 52.4, G 52.5	Other specialised retail (new & second-hand) store	Retail
G 52.6	Retail (non-store)	Retail
G 52.7	Repair	Retail
H 55.1, H 55.3, H 55.4	Hotels, bars and restaurants	Personal & Motor
H 55 (other than H 55.1, H 55.3, H 55.4)	Other catering and accommodation	Personal & Motor
I 63.3	Travel agent	Personal & Motor
I (other than I 63.3)	Other transport, storage & communication	Commercial
J 65	Banks and building societies	Commercial
J (other than J 65)	Other financial institutes	Commercial
K 70.3	Estate agent	Commercial
K 70 (other than K 70.3)	Other real estate activities	Commercial
K 71.4	Renting personal and household goods	Personal & Motor
K 71 (other than K 71.4)	Other renting	Personal & Motor
K 72, K 73, K 74	Other business activities	Personal & Motor
L	Public administration	Public Administration, Health & Education
M	Education	Public Administration, Health & Education
N	Health and social work	Public Administration, Health & Education
O 92.1	Cinema	Personal & Motor
O 92.3	Other entertainment	Personal & Motor
O 92.6	Sport	Personal & Motor
O 92.7	Other recreation	Personal & Motor
O 93	Other service activity	Personal & Motor
O (other than O 92.1, O 92.3, O 92.6, O 92.7, O 93)	Other community, social and personal services	Personal & Motor
P – Q	Private Households; Extra-territorial Bodies	Other

APPENDIX A

Retail capacity

1. The most generally used method of assessing the retail capacity of a locality is the area of property devoted to retailing. This provides an estimate of the property capital devoted to retail, and it is both relatively easy to measure and relatively stable. On the other hand, retail is a comparatively labour intensive enterprise and where data are available, a count of persons employed also provides a valid measure of retailing capacity.
2. Broadly speaking, according to analysis of the Inter-Departmental Business Register, 91,248 employees met the retailing needs of 1,685,510 people in Northern Ireland. This is not a precise relationship as the residents of Northern Ireland can meet their needs by elsewhere (particularly in the rest of the United Kingdom, or in the Republic of Ireland) and tourists will increase retailing demand in the areas that they visit. Furthermore, the contribution of small shops run by the self-employed without employees will not be measured.
3. Nonetheless, an approximate capacity for any settlement or area to meet retailing demand can be estimated by grossing up the number of retailing employees by the Northern Ireland ratio of population to employees. This estimate of the population whose needs can be met by the retailing capacity of a settlement may be compared with the actual population to identify retail centres. Table A.1 contains the results of such an exercise.
4. The estimate is net, rather than gross. It is of course possible for a settlement to draw in shoppers for one purpose, whilst its own population shops elsewhere for another purpose. For the majority of settlements, in fact, this may well be the normal situation. If however, in aggregate, shopping capacity exceeds resident population for a settlement, it is reasonable to regard it as a shopping centre.
5. The fact that the retail capacity of a settlement is estimated to be less than its resident population does not imply that the residents have no access to retail facilities, only that they do not have local access.
6. It is possible for a settlement whose services are relatively small in absolute terms nonetheless to be a service centre, drawing in people for elsewhere. Conversely, a settlement whose services are large in absolute terms may not actually succeed in serving more than its resident population.
7. The Belfast Metropolitan Urban Area and Derry Urban Area are both shopping centres. All the Large and Medium Towns are classified on this basis as shopping centres.
8. Of the Small Towns, only five are shopping centres (Ballycastle, Ballyclare, Ballymoney, Kilkeel, Magherafelt) and the same is true of Intermediate Settlements (Castledearg, Keady, Lisnaskea, Maghera, Moira).
9. There are eleven Large Villages which can be ranked as shopping centres (Bushmills, Cushendall, Draperstown, Dromore – Co Tyrone, Irvinestown, Kilrea, Kircubbin, Markethill, Moy, Portglenone, Rathfriland)

Table A.1 Retail Capacity extra to needs of resident population

Zone	Settlement Band	SETTLEMENT	Centre	Population	Shops (to nearest 5)	Employment	% Extra Capacity
E	A	BMUA	Yes	579,554	3,260	36,979	18.0
W	B	DUA	Yes	90,736	505	5,710	16.4
E	C	ANTRIM	Yes	20,001	115	1,470	35.9
E	C	BALLYMENA	Yes	28,717	335	3,474	123.7
W	C	COLERAINE	Yes	24,089	240	2,653	103.7
E	C	CUA	Yes	57,685	485	5,381	72.5
E	C	LARNE	Yes	18,228	130	1,009	2.4
W	C	NEWRY	Yes	27,433	315	3,567	140.5
E	C	NEWTOWNARDS	Yes	27,821	235	2,138	42.1
W	C	OMAGH	Yes	19,910	185	1,967	82.7
W	D	ARMAGH CITY	Yes	14,590	140	1,118	41.7
E	D	BANBRIDGE	Yes	14,744	115	1,323	65.9
W	D	COOKSTOWN	Yes	10,646	120	1,597	177.4
E	D	DOWNPATRICK	Yes	10,316	80	809	45.0
W	D	DUNGANNON	Yes	11,139	140	1,279	112.3
W	D	ENNISKILLEN	Yes	13,599	185	1,814	146.7
W	D	LIMAVADY	Yes	12,135	80	709	8.1
W	D	STRABANE	Yes	13,456	100	921	26.6
W	E	BALLYCASTLE	Yes	5,089	40	323	17.4
E	E	BALLYCLARE	Yes	8,770	60	538	13.5
W	E	BALLYMONEY	Yes	9,021	80	646	32.4
E	E	BALLYNAHINCH		5,364	50	264	-9.0
W	E	COALISLAND		4,917	30	248	-6.7
E	E	COMBER		8,933	35	240	-50.3
E	E	DONAGHADEE		6,470	30	141	-59.7
E	E	DROMORE		4,968	25	161	-40.1
W	E	KILKEEL	Yes	6,338	55	449	31.0
W	E	MAGHERAFELT	Yes	8,372	100	865	91.1
E	E	NEWCASTLE		7,444	75	342	-15.0
W	E	PORTRUSH		6,372	35	163	-52.7
W	E	PORTSTEWART		7,803	35	153	-63.7
E	E	RANDALSTOWN		4,956	30	245	-8.6
W	E	WARRENPOINT		7,000	45	342	-9.6
E	F	AHOGHILL		3,055	10	*	Deficit
E	F	BALLYGOWAN		2,671	10	*	Deficit
E	F	BROUGHSHANE		2,364	15	*	Deficit
W	F	CASTLEDERG	Yes	2,758	30	169	13.3
E	F	CASTLEWELLAN		2,392	20	101	-21.9
E	F	CRUMLIN		4,259	20	140	-39.2
E	F	CULLYBACKEY		2,405	15	*	Deficit
W	F	DUNGIVEN		2,993	10	*	Deficit
W	F	EGLINTON		3,165	10	97	-43.3
E	F	HILLSBOROUGH		3,400	30	173	-5.9
W	F	KEADY	Yes	2,960	25	207	29.3
E	F	KILLYLEAGH		2,483	15	71	-47.1

Zone	Settlement Band	SETTLEMENT	Centre	Population	Shops (to nearest 5)	Employment	% Extra Capacity
W	F	LISNASKEA	Yes	2,739	30	267	80.3
W	F	MAGHERA	Yes	3,711	40	287	43.0
E	F	MOIRA	Yes	3,682	35	218	9.5
E	F	PORTAFERRY		2,467	15	*	Deficit
W	F	RICHHILL		2,818	10	*	Deficit
W	F	ROSTREVOR		2,444	10	*	Deficit
E	F	SAINTFIELD		2,959	25	140	-12.5
W	F	TANDRAGEE		3,050	20	76	-53.9
E	F	WARINGSTOWN		2,529	5	*	NA
E	F	WHITEHEAD		3,702	15	*	Deficit
E	G	ANNAHILT		1,148	5	*	NA
W	G	ANNALONG		1,778	5	*	NA
E	G	ARDGLASS		1,668	15	*	Deficit
W	G	BALLINAMALLARD		1,340	10	*	Deficit
W	G	BALLYKELLY		1,836	10	*	Deficit
E	G	BALLYWALTER		1,416	5	*	NA
W	G	BELLAGHY		1,063	5	*	NA
W	G	BUSHMILLS	Yes	1,319	15	*	Surplus
E	G	CARNLOUGH		1,444	10	*	Deficit
W	G	CASTLEDAWSON		2,089	10	*	Deficit
W	G	CASTLEROCK		1,336	10	*	Deficit
W	G	CLAUDY		1,316	5	*	NA
W	G	CLOUGHMILLS		1,240	10	*	Deficit
E	G	COGRY/KILBRIDE		1,195	5	*	NA
E	G	CROSSGAR		1,539	15	*	Deficit
W	G	CROSSMAGLEN		1,459	15	*	Deficit
W	G	CUSHENDALL	Yes	1,241	10	*	Surplus
E	G	DOAGH		1,130	5	*	NA
E	G	DOLLINGSTOWN		1,844	5	*	NA
W	G	DRAPERSTOWN	Yes	1,638	20	167	88.5
W	G	DROMORE_OMAGH	Yes	1,101	10	*	Surplus
E	G	DRUMANESS		1,280	5	*	NA
E	G	DUNDRUM		1,065	5	*	NA
W	G	DUNLOY		1,071	5	*	NA
W	G	FINTONA		1,359	15	*	Deficit
W	G	FIVEMILETOWN		1,108	5	*	NA

Zone	Settlement Band	SETTLEMENT	Centre	Population	Shops (to nearest 5)	Employment	% Extra Capacity
W	G	GARVAGH		1,288	10	*	Deficit
E	G	GILFORD		1,573	10	*	Deficit
E	G	GLENAVY		1,069	5	*	NA
E	G	GREYABBEY		1,011	5	*	NA
W	G	GREYSTEEL		1,229	5	*	NA
W	G	IRVINESTOWN	Yes	1,801	30	189	94.1
E	G	KELLS/CONNOR		1,745	10	*	Deficit
W	G	KILREA	Yes	1,513	15	*	Surplus
E	G	KIRCUBBIN	Yes	1,214	5	*	NA
W	G	LISBELLAW		1,046	5	*	NA
E	G	MAGHABERRY		1,696	5	*	NA
E	G	MAGHERALIN		1,144	5	*	NA
W	G	MARKETHILL	Yes	1,292	20	251	259.3
E	G	MILLISLE		1,800	5	NA	NA
W	G	MONEYMORE		1,369	5	NA	NA
W	G	MOY	Yes	1,218	15	*	Surplus
W	G	NEWTOWNSTEWART		1,479	10	*	Deficit
E	G	PORTAVOGIE		1,594	15	*	Deficit
E	G	PORTGLENONE	Yes	1,219	20	149	126.1
E	G	RATHFRILAND	Yes	2,079	25	174	54.8
W	G	SION MILLS		2,050	5	NA	NA
E	G	TEMPLEPATRICK		1,556	5	NA	NA

APPENDIX B

Employment capacity

1. Income from employment forms about 60% of Gross Value Added in Northern Ireland. The distribution of this income between industries depends on the number of employees and the level of pay generally received, and income from self employment forms a supplement of variable importance to income, depending on industry.
2. Nonetheless, the number of employees in an area or settlement does give some indication of the capacity of that locality to generate the employment income and, less certainly, general economic capacity needed to support the residents.
3. At the Northern Ireland level, 749,854 people (employed and self-employed) produce the employment income that supports 1,685,510 population. Applying this ratio to the number of employees located within a settlement or area gives a broad estimate of the population whose employment income can be generated there. This is a net effect, since some of the residents may commute to jobs elsewhere, whilst the jobs in their own area are actually filled by non-residents. Table B.1 contains the results of such an exercise.
4. The fact that the employment capacity of a settlement is estimated to be less than its resident population does not imply that the residents have no access to employment, only that they do not have local access.). It is possible for a settlement whose employment is relatively small in absolute terms nonetheless to be a employment centre, drawing in people for elsewhere. Conversely, a settlement whose employment large in absolute terms may not actually succeed in serving more than its resident population.
5. Relatively few settlements, on this basis, offer employment in excess of their residents' needs. The Belfast Metropolitan Urban Area does so, but the Derry Urban Area has a small deficit.
6. Of the Large and Medium Towns, Newtownards, Larne, Strabane, Banbridge, and Limavady do not appear as employment centres – all lie within a relatively short distance of employment centres such as Belfast and Derry.
7. Only Ballymoney, Kilkeel and Magherafelt rank as employment centres, among the Small Towns, and Lisnaskea among Intermediate Settlements. Among Large Villages, Bushmills, Draperstown, Irvinestown, Markethill, and Moy serve as employment centres.

Table B.1 Employment Capacity extra to needs of resident population

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
E	A	BMUA	Yes	579,554	20,675	301,881	17.09
W	B	DUA		90,736	2,805	38,308	-5.09
E	C	ANTRIM	Yes	20,001	710	14,263	60.31
E	C	BALLYMENA	Yes	28,717	1,375	21,547	68.67
W	C	COLERAINE	Yes	24,089	1,060	15,654	46.08
E	C	CUA	Yes	57,685	2,280	30,305	18.10
E	C	LARNE		18,228	660	7,034	-13.25
W	C	NEWRY	Yes	27,433	1,495	18,874	54.66
E	C	NEWTOWNARDS		27,821	1,120	11,393	-7.94
W	C	OMAGH	Yes	19,910	1,035	13,086	47.75
W	D	ARMAGH CITY	Yes	14,590	730	9,790	50.84
E	D	BANBRIDGE		14,744	620	6,198	-5.50
W	D	COOKSTOWN	Yes	10,646	605	6,191	30.73
E	D	DOWNPATRICK	Yes	10,316	470	5,735	24.97
W	D	DUNGANNON	Yes	11,139	680	9,148	84.62
W	D	ENNISKILLEN	Yes	13,599	915	11,398	88.42
W	D	LIMAVADY		12,135	390	3,954	-26.75
W	D	STRABANE		13,456	455	5,688	-4.97
W	E	BALLYCASTLE		5,089	270	1,858	-17.93
E	E	BALLYCLARE		8,770	325	2,806	-28.07
W	E	BALLYMONEY	Yes	9,021	495	5,119	27.56
E	E	BALLYNAHINCH		5,364	250	2,118	-11.24
W	E	COALISLAND		4,917	205	1,539	-29.64
E	E	COMBER		8,933	225	1,330	-66.53
E	E	DONAGHADEE		6,470	185	1,208	-58.03
E	E	DROMORE		4,968	200	1,767	-20.04
W	E	KILKEEL	Yes	6,338	380	3,056	8.39
W	E	MAGHERAFELT	Yes	8,372	530	5,549	49.00
E	E	NEWCASTLE		7,444	365	2,931	-11.49
W	E	PORTRUSH		6,372	210	1,760	-37.91
W	E	PORTSTEWART		7,803	245	1,458	-58.00
E	E	RANDALSTOWN		4,956	195	1,187	-46.16
W	E	WARRENPOINT		7,000	305	2,269	-27.13
E	F	AHOGHILL		3,055	65	1,174	-13.61
E	F	BALLYGOWAN		2,671	70	412	-65.32
E	F	BROUGHSHANE		2,364	75	417	-60.35
W	F	CASTLEDERG		2,758	155	844	-31.21
E	F	CASTLEWELLAN		2,392	105	913	-14.20
E	F	CRUMLIN		4,259	115	850	-55.14
E	F	CULLYBACKEY		2,405	50	345	-67.75
W	F	DUNGIVEN		2,993	105	735	-44.80
W	F	EGLINTON		3,165	75	524	-62.78
E	F	HILLSBOROUGH	Yes	3,400	245	1,627	7.57
W	F	KEADY		2,960	125	817	-37.95
E	F	KILLYLEAGH		2,483	95	515	-53.37
W	F	LISNASKEA	Yes	2,739	160	1,423	16.79
W	F	MAGHERA	Yes	3,711	190	1,665	0.86
E	F	MOIRA		3,682	150	1,324	-19.16

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
E	F	PORTAFERRY		2,467	85	574	-47.70
W	F	RICHHILL		2,818	65	363	-71.04
W	F	ROSTREVOR		2,444	80	348	-67.99
E	F	SAINTFIELD		2,959	160	892	-32.23
W	F	TANDRAGEE		3,050	135	1,055	-22.24
E	F	WARINGSTOWN		2,529	65	266	-76.36
E	F	WHITEHEAD		3,702	95	624	-62.11
E	G	ANNAHILT		1,148	35	101	-80.22
W	G	ANNALONG		1,778	90	474	-40.07
E	G	ARDGLASS		1,668	85	440	-40.70
W	G	BALLINAMALLARD		1,340	60	452	-24.17
W	G	BALLYKELLY		1,836	70	655	-19.80
E	G	BALLYWALTER		1,416	35	118	-81.27
W	G	BELLAGHY		1,063	55	248	-47.55
W	G	BUSHMILLS	Yes	1,319	80	697	18.79
E	G	CARNLOUGH		1,444	45	219	-65.91
W	G	CASTLEDAWSON		2,089	105	797	-14.23
W	G	CASTLEROCK		1,336	30	146	-75.43
W	G	CLAUDY		1,316	35	121	-79.33
W	G	CLOUGHMILLS		1,240	70	293	-46.88
E	G	COGRY/KILBRIDE		1,195	20	51	-90.41
E	G	CROSSGAR		1,539	50	296	-56.76
W	G	CROSSMAGLEN		1,459	75	471	-27.43
W	G	CUSHENDALL		1,241	75	512	-7.25
E	G	DOAGH		1,130	50	183	-63.59
E	G	DOLLINGSTOWN		1,844	45	505	-38.44
W	G	DRAPERSTOWN	Yes	1,638	135	940	29.01
W	G	DROMORE_OMAGH		1,101	95	431	-12.00
E	G	DRUMANESS		1,280	20	121	-78.75
E	G	DUNDRUM		1,065	30	105	-77.84
W	G	DUNLOY		1,071	45	303	-36.40
W	G	FINTONA		1,359	70	405	-33.01
W	G	FIVEMILETOWN		1,108	40	240	-51.31
W	G	GARVAGH		1,288	90	533	-6.97
E	G	GILFORD		1,573	60	372	-46.84
E	G	GLENAVY		1,069	15	*	Deficit
E	G	GREYABBEY		1,011	20	56	-87.55
W	G	GREYSTEEL		1,229	30	228	-58.30
W	G	IRVINESTOWN	Yes	1,801	130	809	0.98
E	G	KELLS/CONNOR		1,745	55	314	-59.55
W	G	KILREA		1,513	110	602	-10.56
E	G	KIRCUBBIN		1,214	55	298	-44.82
W	G	LISBELLAW		1,046	40	153	-67.12
E	G	MAGHABERRY		1,696	40	227	-69.91
E	G	MAGHERALIN		1,144	30	341	-32.99
W	G	MARKETHILL	Yes	1,292	110	822	43.02
E	G	MILLISLE		1,800	40	287	-64.16
W	G	MONEYMORE		1,369	60	380	-37.60
W	G	MOY	Yes	1,218	110	553	2.06

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
<i>W</i>	<i>G</i>	<i>NEWTOWNSTEWART</i>		<i>1,479</i>	<i>75</i>	<i>388</i>	<i>-41.03</i>
<i>E</i>	<i>G</i>	<i>PORTAVOGIE</i>		<i>1,594</i>	<i>90</i>	<i>388</i>	<i>-45.28</i>
<i>E</i>	<i>G</i>	<i>PORTGLENONE</i>		<i>1,219</i>	<i>80</i>	<i>392</i>	<i>-27.71</i>
<i>E</i>	<i>G</i>	<i>RATHFRILAND</i>		<i>2,079</i>	<i>125</i>	<i>775</i>	<i>-16.20</i>
<i>W</i>	<i>G</i>	<i>SION MILLS</i>		<i>2,050</i>	<i>40</i>	<i>202</i>	<i>-77.85</i>
<i>E</i>	<i>G</i>	<i>TEMPLEPATRICK</i>		<i>1,556</i>	<i>45</i>	<i>685</i>	<i>-1.04</i>

Any count of 5 establishments or less is shown as 5

APPENDIX C
Public Administration, Health and Education

1. There is no generally used method of assessing the capacity of a locality to provide public administration, health and education. These are, however, comparatively labour intensive enterprises and where data are available, a count of persons employed also provides a valid measure of such capacity.
2. Broadly speaking, according to analysis of the Inter-Departmental Business Register, 238,133 employees met the public administration, health and education needs of 1,685,510 people in Northern Ireland. This is not a precise relationship as the residents of Northern Ireland can meet their needs by elsewhere (particularly in the rest of the United Kingdom, or in the Republic of Ireland) and tourists, visitors and cross-border commuters will increase demand in the areas that they visit.
3. Nonetheless, an approximate capacity for any settlement or area to meet public administration, health and education (PAHE) demand can be estimated by grossing up the number of employees in these sectors by the Northern Ireland ratio of population to employees. This estimate of the population whose needs can be met by the capacity of a settlement may be compared with the actual population to identify PAHE centres. Table C.1 contains the results of such an exercise.
4. The estimate is net, rather than gross. It is of course possible for a settlement to draw in people for one purpose, whilst its own population travels elsewhere for another purpose. For the majority of settlements, in fact, this may well be the normal situation. If however, in aggregate, PAHE capacity exceeds resident population for a settlement, it is reasonable to regard it as a PAHE centre.
5. The fact that the PAHE capacity of a settlement is estimated to be less than its resident population does not imply that the residents have no access to PAHE, only that they do not have local access.
6. It is possible for a settlement whose PAHE services are relatively small in absolute terms nonetheless to be a service centre, drawing in people for elsewhere. Conversely, a settlement whose services are large in absolute terms may not actually succeed in serving more than its resident population.

Table C.1 Public Administration, Health and Education Capacity extra to needs of resident population

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
E	A	BMUA	Yes	579,554	3,310	107,925	32.0
W	B	DUA	Yes	90,736	545	15,932	24.4
E	C	ANTRIM	Yes	20,001	145	6,515	130.8
E	C	BALLYMENA	Yes	28,717	255	6,152	51.8
W	C	COLERAINE	Yes	24,089	160	6,598	94.1
E	C	CUA		57,685	335	7,177	-11.8
E	C	LARNE		18,228	100	1,623	-36.9
W	C	NEWRY	Yes	27,433	230	6,785	75.3
E	C	NEWTOWNARDS		27,821	120	3,414	-13.0
W	C	OMAGH	Yes	19,910	215	6,653	136.8
W	D	ARMAGH CITY	Yes	14,590	140	5,329	158.8
E	D	BANBRIDGE		14,744	85	1,890	-9.2
W	D	COOKSTOWN		10,646	80	1,356	-9.7
E	D	DOWNPATRICK	Yes	10,316	115	3,180	118.4
W	D	DUNGANNON	Yes	11,139	110	3,429	118.1
W	D	ENNISKILLEN	Yes	13,599	170	4,675	143.6
W	D	LIMAVADY	Yes	12,135	65	1,721	0.5
W	D	STRABANE		13,456	80	1,537	-19.1
W	E	BALLYCASTLE		5,089	50	704	-2.0
E	E	BALLYCLARE		8,770	45	883	-28.7
W	E	BALLYMONEY	Yes	9,021	80	1,654	29.9
E	E	BALLYNAHINCH		5,364	30	642	-15.2
W	E	COALISLAND		4,917	20	310	-55.3
E	E	COMBER		8,933	25	359	-71.5
E	E	DONAGHADEE		6,470	25	519	-43.2
E	E	DROMORE		4,968	25	441	-37.1
W	E	KILKEEL		6,338	40	680	-24.0
W	E	MAGHERAFELT	Yes	8,372	100	2,486	110.4
E	E	NEWCASTLE		7,444	50	800	-23.8
W	E	PORTRUSH		6,372	35	451	-49.8
W	E	PORTSTEWART		7,803	25	289	-73.8
E	E	RANDALSTOWN		4,956	25	319	-54.4
W	E	WARRENPOINT		7,000	30	473	-52.1
E	F	AHOGHILL		3,055	10	*	Deficit
E	F	BALLYGOWAN		2,671	5	*	NA
E	F	BROUGHSHANE		2,364	10	*	Deficit
W	F	CASTLEDERG		2,758	15	*	Deficit
E	F	CASTLEWELLAN		2,392	15	*	Deficit
E	F	CRUMLIN		4,259	15	*	Deficit
E	F	CULLYBACKEY		2,405	10	*	Deficit
W	F	DUNGIVEN		2,993	20	169	-60.0
W	F	EGLINTON		3,165	10	*	Deficit
E	F	HILLSBOROUGH		3,400	20	330	-31.2
W	F	KEADY		2,960	20	313	-25.1
E	F	KILLYLEAGH		2,483	15	*	Deficit
W	F	LISNASKEA	Yes	2,739	30	478	23.7
W	F	MAGHERA		3,711	25	391	-25.3
E	F	MOIRA		3,682	15	*	Deficit

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
E	F	PORTAFERRY		2,467	15	*	Deficit
W	F	RICHHILL		2,818	5	*	NA
W	F	ROSTREVOR		2,444	10	*	Deficit
E	F	SAINTFIELD		2,959	20	178	-57.4
W	F	TANDRAGEE		3,050	15	*	Deficit
E	F	WARINGSTOWN		2,529	5	*	NA
E	F	WHITEHEAD		3,702	20	253	-51.6
E	G	ANNAHILT		1,148	5	*	NA
W	G	ANNALONG		1,778	5	*	NA
E	G	ARDGLASS		1,668	15	*	Deficit
W	G	BALLINAMALLARD		1,340	5	*	NA
W	G	BALLYKELLY	Yes	1,836	15	*	Surplus
E	G	BALLYWALTER		1,416	5	*	NA
W	G	BELLAGHY		1,063	5	*	NA
W	G	BUSHMILLS		1,319	15	*	Deficit
E	G	CARNLOUGH		1,444	5	*	NA
W	G	CASTLEDAWSON		2,089	10	*	Deficit
W	G	CASTLEROCK		1,336	5	*	NA
W	G	CLAUDY		1,316	5	*	NA
W	G	CLOUGHMILLS		1,240	10	*	Deficit
E	G	COGRY/KILBRIDE		1,195	5	*	NA
E	G	CROSSGAR		1,539	5	*	NA
W	G	CROSSMAGLEN		1,459	15	*	Deficit
W	G	CUSHENDALL		1,241	10	*	Deficit
E	G	DOAGH		1,130	5	*	NA
E	G	DOLLINGSTOWN		1,844	5	*	NA
W	G	DRAPERSTOWN		1,638	10	*	Deficit
W	G	DROMORE_OMAGH		1,101	10	*	Deficit
E	G	DRUMANESS		1,280	5	*	NA
E	G	DUNDRUM		1,065	5	*	NA
W	G	DUNLOY		1,071	5	*	NA
W	G	FINTONA		1,359	10	*	Deficit
W	G	FIVEMILETOWN		1,108	10	*	Deficit
W	G	GARVAGH	Yes	1,288	15	*	Surplus
E	G	GILFORD		1,573	10	*	Deficit
E	G	GLENAVY		1,069	5	*	NA
E	G	GREYABBEY		1,011	5	*	NA
W	G	GREYSTEEL		1,229	5	*	NA
W	G	IRVINESTOWN	Yes	1,801	25	255	Surplus
E	G	KELLS/CONNOR		1,745	5	*	NA
W	G	KILREA		1,513	20	176	Deficit
E	G	KIRCUBBIN		1,214	15	*	Deficit
W	G	LISBELLAW		1,046	5	*	NA
E	G	MAGHABERRY		1,696	5	*	NA
E	G	MAGHERALIN		1,144	5	*	NA
W	G	MARKETHILL		1,292	15	*	Deficit
E	G	MILLISLE		1,800	5	*	NA
W	G	MONEYMORE		1,369	10	*	Deficit
W	G	MOY		1,218	20	145	-15.9

Zone	Settlement Band	SETTLEMENT	Centre	Population	Establishments (to nearest 5)	Employment	% Extra Capacity
<i>W</i>	<i>G</i>	<i>NEWTOWNSTEWART</i>		<i>1,479</i>	<i>10</i>	<i>*</i>	<i>Deficit</i>
<i>E</i>	<i>G</i>	<i>PORTAVOGIE</i>		<i>1,594</i>	<i>5</i>	<i>*</i>	<i>NA</i>
<i>E</i>	<i>G</i>	<i>PORTGLENONE</i>		<i>1,219</i>	<i>10</i>	<i>*</i>	<i>Deficit</i>
<i>E</i>	<i>G</i>	<i>RATHFRILAND</i>		<i>2,079</i>	<i>20</i>	<i>226</i>	<i>-23.0</i>
<i>W</i>	<i>G</i>	<i>SION MILLS</i>		<i>2,050</i>	<i>5</i>	<i>*</i>	<i>NA</i>
<i>E</i>	<i>G</i>	<i>TEMPLEPATRICK</i>		<i>1,556</i>	<i>10</i>	<i>*</i>	<i>Deficit</i>

Any count of 5 establishments or less is shown as 5

APPENDIX D Facilities in Settlements

1. Although the size of service establishments in a settlement is important, it can be argued that the simple presence or absence of a service is of at least equal importance to the residents of the area. There have been ongoing attempts, firstly to define an urban hierarchy for settlements in England and Wales, and then to update this. Based on empirical studies in 1938, Smailes² identified seven ranks of settlement from hamlet to major city, each classified on the basis of the presence or absence of facilities and services such as departmental stores, Woolworth's store, three banks, secondary school, cinema, hospital, weekly newspaper and civic university. Smith³, using a larger range of indicators, showed that the urban hierarchy had remained largely stable over the forty year period 1938-78. Hall *et al*⁴ carried this approach through to 1998, using a database recording the presence or absence of 20 urban functions in 911 urban centres.

Tables D.1- D.4 show the general situation for a range of facilities.

2. It is worth noting the following:
 - a) There is no definition of supermarket on the basis of SIC, numbers employed or store area (the latter not being, in any case, available to this study). Supermarkets are identified on the basis of traders (eg Sainsbury, Tesco etc) or brandings (eg VG, Centra etc), which are considered likely to be so regarded. Accordingly, the estimates should be regarded as indicative rather than precise. Most such stores will satisfy the SIC criteria defining food stores.
 - b) There are considerably more post offices in Northern Ireland (549) than the SIC analysis would suggest (259). The difference is due to the fact that a great many post offices are jointly located with other facilities. Whether or not the joint facility is classified as a post office is dependent on the view taken of the business as a whole (eg shop with post office attached or post office with shop attached)
 - c) The rail network in Northern Ireland is so sparse (four lines) that it is simply impossible for the majority of settlements to have a facility linked to it.
 - d) All settlements in Bands A-G have at least one bus stop.
3. Broadly speaking, large villages tend to have 3-4 food shops and a pharmacy, together with about four cafes, takeaways and bars. They may have a clothing shop, but are unlikely to have an electrical goods shop or optician. By contrast, a small town tends to have 12-13 food shops, including one or two supermarkets, together with three or four pharmacies and six or seven clothing shops. There are 2-3 electrical goods shops and over twenty cafes, takeaways and bars.
4. As regards educational establishments, a large village is likely to have two or three primary or pre-primary establishments, and probably (60%) a secondary establishment. This contrasts with small towns where there are generally about seven primary establishments, 4-5 secondary

² AE Smailes, 'The Urban Hierarchy in England and Wales', *Geography*, 29 (1944)

³ RDP Smith, 'The Changing Urban Hierarchy', *Regional Studies*, 2 (1978)

⁴ P Hall, S Marshall, and M Low, 'The Changing Urban Hierarchy in England and Wales', *Regional Studies*, 35 (2001)

establishments and a library, as well as a substantial possibility (67%) of a higher education establishment.

5. Large villages do not have hospitals, and frequently do not have dentists. There is a reasonable chance (71%) of a medical centre of some kind. Small towns, on the other hand, sometimes (40%) have a hospital as well as usually having about two medical establishments and 2-3 dentists.
6. There is some chance that a large village will have a bank or building society (48%), or a staffed sporting facility (48%), but it is unlikely to have any sort of bus station (15%). A small town is likely to have three banks or building societies and 3-4 staffed sports facilities, and most have a bus station of some kind (80% chance).

Table D.1**Average numbers of retail and food facilities**

Settlement Band	Super-markets	Food Shops	Pharmacies	Clothing Shops	Electrical Goods	Opticians	Restaurants etc	Take Out Food	Bars
A (BMUA)	140*	755*	280*	535*	105*	85*	505*	390*	370*
B (DUA)	5*	115*	40*	95*	15*	5*	60*	60*	80*
C	3.00	49.50	13.50	60.63	7.63	6.25	29.75	23.00	26.75
D	1.47	27.00	7.88	27.50	3.75	3.25	16.25	9.75	18.75
E	.73	12.47	3.53	6.60	2.40	1.60	8.80	6.80	7.73
F	.42	6.18	1.64	2.09	.64	.77	2.91	1.82	4.55
G	7.00	3.56	.96	.73	.21	.31	1.15	1.25	2.52
H (districts)	2.08	18.85	2.46	2.42	1.38	.23	8.31	2.23	14.54

* To nearest 5

Table D.2**Average numbers of educational facilities**

Settlement Band	Primary Schools	Secondary Schools	Higher Education	Libraries	Museums
A (BMUA)	510*	230*	60*	60*	10*
B (DUA)	85*	45*	5*	10*	0*
C	28.88	20.13	4.25	2.63	.38
D	14.13	13.13	1.88	1.25	.75
E	7.00	4.20	.67	1.07	.00
F	4.00	1.18	.05	.68	.00
G	2.38	.60	.02	.38	.02
H (districts)	32.65	3.04	.54	.27	.12

* To nearest 5

Table D.3**Average number of Health Facilities**

Settlement Band	Hospital	Medical Centre	Dentist
A (BMUA)	45*	175*	150*
B (DUA)	10*	20*	20*
C	3.50	8.38	8.13
D	2.13	4.25	6.13
E	.40	2.00	2.73
F	.05	1.23	.68
G	.00	.71	.38
H (districts)	.15	2.92	.54

* To nearest 5

Table D.4

Average numbers of transport, financial and staffed sporting facilities

Settlement Band	Railway	Bus	Post Office	Bank and Building Societies	Sport
A (BMUA)	15*	25*	55	175*	225*
B (DUA)	0*	5*	14	15*	30*
C	1.00	1.38	4.25	10.38	12.13
D	.13	2.38	2.75	5.25	4.88
E	.07	.80	1.93	3.00	3.27
F	.05	.05	.95	1.05	.82
G	.00	.15	.54	.48	.48
H (districts)	.04	.62	2.23	.69	7.08

* To nearest 5

APPENDIX E

Rating of Settlements by Facilities

1. The settlements have been rated according to the presence or absence of various facilities, in the categories: Education, Retail, Health, Transport, Social, Financial and Government.
2. As shown in Table E.1, each category has a rating set according to the level of service present in a settlement. These ratings have been devised so that the range of values theoretically achievable by a settlement are the same in all categories. This accords greater significance to the absence of facilities possessed by most settlements (large and small).
3. Thus a settlement with an ATM, but none of the other financial services listed, would achieve a rating of 1 in the Financial Category. To achieve a rating of 3, a bank must be present in the settlement. Since, however, the presence of a bank is the criterion for achieving higher ratings (both 4 and 5), a settlement possessing a bank would be assessed to the highest rating (ie 5) in the Financial Category, giving it a rating no worse than Belfast.
4. By contrast, a settlement with a Foodshop would be ranked as 1 in the Retail Category, but as 3 if it also possessed a Clothes Shop and Supermarket.
5. The overall rating of the settlement is determined, however, by the *lowest* of its ratings. Thus a settlement with a museum (Social Category rating 5) but no foodshop (Retail Category 0) would be rated overall as Category 0. This reflects the fact that the settlement cannot meet a very basic requirement of the residents in one category of need, despite its possession of a high order facility in another category.
6. Table E.2 shows the relationship between the Nine Cluster of Analysis and the Settlement Rating. There were in total, 30 settlements receiving a rating of 3 or more. No main settlements in Clusters 1-7 had a rating below 3, and of the 82 settlements in Clusters 8 and 9, only five (Ballycastle, Kilkeel, Lisnaskea, Newcastle, Portrush) received a rating of 3 or more.
7. A rating of 3 implies that a settlement lacks at least one of: a FE institute, University, electrical store, hospital, library or museum. Other facilities considered are present. It thus has a secondary school, supermarket, clothes shop, health centre, dentist, optician, pharmacy, bus station, sports facility, bank and government office.

Table E.1 Service Ranking by Facility Present

Rating	0	1	2	3	4	5
Education	None	None	Primary	Secondary	FE	University
Retail	None	Food or Supermarket	Eatout	Supermarket Clothes	Electrical	Electrical
Health	None	None	None	Health C Dentist Optician Pharmacy	Health C Dentist Optician Pharmacy	Hospital
Transport	None	None	Bus Stop	Bus Station	Bus Station	Bus Station
Social	None	None	Eat In	Sport	Library	Museum
Financial	None	ATM	Post Office	Bank	Bank	Bank
Government	None	None	None	Office	Office	Office

For each category (Education, Retail etc) the settlement is given the *highest* rating justified by the facilities present in the settlement. The overall rating of the settlement is determined by the *lowest* category rating achieved.

Table E.2 Cluster9 by Settlement Rating

Cluster9	Settlement Rating						Total
	0	1	2	3	4	5	
BMUA 1	3	0	4	0	4	1	12
DUA 2	0	2	1	0	0	1	4
Craigavon 3	0	0	0	0	1	0	1
Ballymena, Newry 4	0	0	0	0	2	0	2
5	0	0	0	0	4	0	4
6	0	0	0	1	5	0	6
7	0	0	0	2	4	0	6
8	1	1	12	3	2	0	19
9	7	14	42	0	0	0	63

BMUA and Derry main settlements are rated 5
 Craigavon, Ballymena, Newry, Coleraine, Newtownards, Omagh, Enniskillen are all rated 4
 Most of Bands 6 and 7 (mostly Medium Towns, some Small, some Large) are rated 4
 Band 8 (mostly Small Towns, some Intermediate, Some Village) are rated mostly 2
 Band 9 (Intermediate and Large Village) are mostly rated 2, with a minority of lower ratings.

APPENDIX F
Alternative population counts

1. The number of people in a settlement varies during the day. Whilst some of the residents travel to elsewhere to work, attend places of education or shop, non-residents will travel into the settlement for the same reasons. Consequently, the resident population is only an approximate measure of the numbers available to make use of the services in any settlement.
2. Information on the number of non-residents using settlements for shopping purposes is not available. Whilst an analysis of school records would permit identification of travel for educational purposes, this data would be onerous to compile and is not available in practice.
3. Data are, however, available from the 2001 Census of Population on travel to work between each ward of residence and each ward of workplace for which a flow occurred. From a Census Output Area-based approximation of settlements, it has proved generally possible to assess the settlement to which each ward most properly might be allocated. This assessment is reasonably precise for medium towns or larger, but rural fringes form an increasing proportion of the wards within which smaller settlements lie. The form and size of some wards is such that they contain fragments of two discrete settlements, as well as the intervening countryside. Not all smaller settlements could be allocated to a ward.
4. Nonetheless, all wards have been allocated to a single settlement (or to Band H and district council), allowing the analysis of the Census data to show the approximate total number of workers working in settlements, as well as the approximate total number of workers resident in those settlements. Table F.1 shows an analysis by settlement band. As noted elsewhere, small towns and smaller settlements in general export workers, whilst larger settlements import them.
5. This data by settlement permits an improved estimation of the daytime population of a settlement, by deducting the resident workers from the total population and adding the workers working there. The number of facilities in each settlement can be correlated with population (post office and railway establishments being excluded for reasons enumerated in paragraph 2 of Appendix D).
6. Table F.2 shows that there is a high and statistically significant correlation between daytime and resident population (.992). For all facilities, there is a high and statistically significant correlation with resident population (ranging from .765 to .974), but the correlation with daytime population is even higher (ranging from .800 to .987). In every instance save one, daytime population has the higher correlation with facility provision, the exception being primary/pre-primary educational facilities (it is a reasonable assumption that workers make no direct use of these facilities).
7. The correlation between daytime population and number of facilities varies noticeably. The highest correlations (.970 to .987) are for supermarkets, foodshops, cafes and pharmacies. Opticians and electrical goods have a lower correlation (.943 and .955), whilst other services such as libraries, bars, dentists, banks/building societies and medical centres have a lower

correlation (.907 to .932). Below this are museums, hospitals, bus stations, and schools both secondary and primary (.800 to .876).

8. It is worthy of comment that it is the provision of educational establishments and hospitals that has the weakest links to population (whether resident or day time). Hospitals are intended to serve their total catchment population (drawn from the whole of Northern Ireland in some instances), rather than those who live or work in the settlement where the hospitals are located. The nature of the educational system, with segregated education, means that in small settlements, more schools are needed than might be required on a strictly population basis

Table F.1 Workers by settlement band

SettlementBand	Workers Resident	Workers In area
A	232749	283746
B	29421	32370
C	93647	114157
D	38743	50802
E	40857	32601
F	27809	22036
G	51085	32892
H	157588	103295
Total	671899	671899

Table F.2 Correlation of Population Counts with settlement facilities

	Daytime Population	Resident Population
Daytime Population	1.000(NA)	.992(**)
Resident Population	.992(**)	1.000(NA)
Foodshop	.987(**)	.974(**)
Supermarket	.970(**)	.953(**)
Pharmacy	.984(**)	.963(**)
Clothing	.919(**)	.905(**)
Electrical Goods Shop	.955(**)	.943(**)
Café/Restaurant	.973(**)	.953(**)
Takeaway	.920(**)	.896(**)
Bars	.914(**)	.896(**)
Optician	.943(**)	.917(**)
Bus Station	.845(**)	.822(**)
Bank or Building Society	.919(**)	.883(**)
Primary Education	.876(**)	.891(**)
Secondary Education	.872(**)	.853(**)
Higher Education	.907(**)	.870(**)
Hospital	.826(**)	.813(**)
Medical Centre	.932(**)	.899(**)
Dentist	.915(**)	.893(**)
Library	.907(**)	.874(**)
Museum	.800(**)	.765(**)
Sport Facility	.929(**)	.922(**)

APPENDIX G
Controlling for the Effect of Population

1. As noted in Appendix F, there is a strong relationship between population and service levels. This makes it difficult to identify the relationship between service levels themselves.
2. Through use of the technique of partial correlation, however, it is possible to make allowances for the impact of population on service levels. The correlation between a range of services, controlling for daytime population, is given in Table G.1.
3. There tend to be more food shops in settlements where there are many electrical goods shops or cafes and restaurants, and fewer when there are many primary schools and hospitals. Electrical goods have similar relationships, but are also less common in settlements where there are many bars. Bars are common in settlements where schools (primary and secondary), medical centres and hospitals are relatively numerous.
4. In general, schools, medical centres and hospitals tend to be most common where there are other such facilities and to the extent that they have any relationship with the number of shops, there are relatively fewer shops in settlements where they occur. As noted elsewhere, small settlements have shops, but are less likely to have public sector services.
5. The exception to this is primary schools, which are found in most settlements. They are also found extensively outside settlements, whereas other public services are less dispersed, and this may explain the relationship.

Table G.1 Partial Correlations, controlling for daytime population

	Food	Electrical Goods	Cafes & Restaurants	Bars	Primary Schools	Secondary Schools	Medical Centres	Hospital
Food	*	.343	.468	<i>.090</i>	-.215	-.059	<i>.081</i>	-.179
Electrical Goods	.343	*	.524	-.199	-.453	-.043	-.190	-.021
Cafes & Restaurants	.468	.524	*	<i>-.016</i>	-.405	-.040	.235	-.076
Bars	<i>.090</i>	-.199	<i>-.016</i>	*	.587	.719	.708	.391
Primary Schools	-.215	-.453	-.405	.587	*	.337	.228	.146
Secondary Schools	-.059	-.043	-.040	.719	.337	*	.624	.693
Medical Centres	<i>.081</i>	-.190	.235	.708	.228	.624	*	.376
Hospital	-.179	-.021	-.076	.391	.146	.693	.376	*

Values shown in italics are not statistically valid at the 95% percent level

APPENDIX H Bus Routes

1. The number of bus stops and cross-country bus routes serving a settlement is likely to proportionate to the perceived importance of that settlement. The basis for the perceived importance of the settlement may be judged from the correlations between bus stops, bus routes and other characteristics of the settlement.
2. Table H.1 shows some correlations for settlements in Bands C-G, excluding minor settlements for which individual data are not available, and BMUA/Derry. The number of bus stops in a settlement shows the strongest correlation with population, as does the number of bus routes. The numbers of other facilities (supermarkets, secondary schools, hospitals) are also strongly (and significantly) correlated with the level of transport service, but as noted elsewhere, there is a correlation between population and level of service facilities to be found in a settlement.
3. Table H.2 shows the partial correlations, controlling for the effects of population. The correlations are far weaker, with a (statistically significant) correlation of only .340 between number of bus routes and number of bus stops. Since a number of bus routes can share the same bus stops, this is understandable. There is no significant correlation between the number of bus stops in a settlement and the number of facilities. There is also no significant, correlation between the number of supermarkets and the number of routes, but there tend to be more bus routes serving settlements with more secondary schools and hospitals. This is statistically significant.
4. Table H.3 shows partial correlations for shops in addition to supermarkets, controlling for population. There is a statistically significant correlation between the number of bus routes and both the number of electrical goods shops and the number of food shops (the former being stronger than the correlation for hospitals, less than that for secondary schools, whilst the latter is weaker than that for hospitals). Numbers of pharmacies are not related to the number of bus routes.
5. Table H.4 shows that numbers of clothing shops, banks and eat in places are also related to numbers of bus routes. Summarising Tables H.2 – H.4:

Facility	Partial Correlation with bus routes (controlling for population)
Secondary School	.483
Electrical Goods	.404
Eat In places	.390
Hospital	.384
Banks	.351
Food shops	.252
Clothing Shops	.250

6. This suggests that the accessibility of a settlement by bus is linked primarily to its population and then to its public sector and high order retail facilities, such as schools, hospitals, banks and electrical goods, rather than to facilities such as food shops, clothing shops, pharmacies and supermarkets. Conversely, settlements with small population and fewer high order facilities are less accessible. If their lower order facilities cease to be available, the residents dependent on public transport will experience problems in accessing a similar service elsewhere

Table H.1 Correlations of transport routes with population and facilities for settlements in Bands C-G

		Population	Bus Stops	Ulsterbus Routes	Super-market	Secondary Schools	Hospitals
Population	Pearson Correlation	1	.765(**)	.762(**)	.904(**)	.825(**)	.718(**)
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	101	101	101	101	101	101
Bus Stops	Pearson Correlation	.765(**)	1	.725(**)	.725(**)	.665(**)	.569(**)
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	101	101	101	101	101	101
Ulsterbus Routes	Pearson Correlation	.762(**)	.725(**)	1	.654(**)	.805(**)	.721(**)
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	101	101	101	101	101	101
Supermarkets	Pearson Correlation	.904(**)	.725(**)	.654(**)	1	.722(**)	.626(**)
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	101	101	101	101	101	101
Secondary Schools	Pearson Correlation	.825(**)	.665(**)	.805(**)	.722(**)	1	.746(**)
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	101	101	101	101	101	101
Hospitals	Pearson Correlation	.718(**)	.569(**)	.721(**)	.626(**)	.746(**)	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	101	101	101	101	101	101

** Correlation is significant at the 0.01 level (2-tailed).

Table H.2 Correlations of transport routes with facilities for settlements in Bands C-G, controlling for population

Control Variable: Population		Bus Stops	Ulsterbus Routes	Super-markets	Secondary Schools	Hospitals
Bus stops	Correlation	1.000	.340	.123	.095	.044
	Significance (2-tailed)	.	.001	.224	.346	.661
	Df	0	98	98	98	98
Ulsterbus Routes	Correlation	.340	1.000	-.125	.483	.384
	Significance (2-tailed)	.001	.	.217	.000	.000
	df	98	0	98	98	98
Supermarkets	Correlation	.123	-.125	1.000	-.095	-.077
	Significance (2-tailed)	.224	.217	.	.345	.447
	df	98	98	0	98	98
Secondary Schools	Correlation	.095	.483	-.095	1.000	.391
	Significance (2-tailed)	.346	.000	.345	.	.000
	df	98	98	98	0	98
Hospitals	Correlation	.044	.384	-.077	.391	1.000
	Significance (2-tailed)	.661	.000	.447	.000	.
	df	98	98	98	98	0

Table H.3 Correlations of bus routes with shop facilities for settlements in Bands C-G, controlling for population

Control Variable: Population		Ulsterbus Routes
Ulsterbus Routes	Correlation	1.000
	Significance (2-tailed)	.
	df	0
Supermarkets	Correlation	-.125
	Significance (2-tailed)	.217
	df	98
Food Shops	Correlation	.252
	Significance (2-tailed)	.011
	df	98
Pharmacy	Correlation	.091
	Significance (2-tailed)	.366
	df	98
Electrical Goods	Correlation	.404
	Significance (2-tailed)	.000
	df	98

Table H.4 Correlations of bus routes with other facilities for settlements in Bands C-G, controlling for population

Control Variable: population		Ulsterbus Routes
Ulsterbus Routes	Correlation	1.000
	Significance (2-tailed)	.
	df	0
Clothing Shops	Correlation	.250
	Significance (2-tailed)	.012
	df	98
Eat In	Correlation	.390
	Significance (2-tailed)	.000
	df	98
Banks	Correlation	.351
	Significance (2-tailed)	.000
	df	98

APPENDIX I

Voluntary and Community Organisations

1. Northern Ireland Council for Voluntary Action (NICVA) carries out a periodic State of the Sector Survey. The fourth of these (SOSIV) approached 3,390 organisations, including charities, community organisations, consumer organisations, co-operatives, credit unions, housing associations and voluntary organisations. NICVA kindly supplied the working group with the postcode and type of each organisation approached, from which it was possible to determine the settlement in which the contact address of the organisation was located.
2. Table I.1 shows that unlike the retail and public sectors, there is generally much wider dispersal of voluntary and community organisations. Some 42% of all organisations are based in Belfast and Derry (compared with 40% of the population) and 26% in villages and more rural areas (compared with 31% of the population). When this is disaggregated, it can be seen that charities are Belfast/Derry-focussed (53%) rather than located in villages and more rural areas (17%). Belfast and Derry account for 43% of voluntary organisations, compared with the 21% in villages and more rural areas, more in line with population. Community organisations are markedly different. Although the population of Belfast is 6.4 times that of Derry, the number of community organisations is only 3.4 times as many. Together, Belfast and Derry account for 38% of community organisations, but villages and more rural areas have 36%.
3. Table I.2 shows that the numbers of organisations in settlements and areas are strongly correlated with population. When the effect of population is controlled (Table I.3), the relationship between numbers of community organisations and numbers of other types of organisations is substantially weaker than the relationships between numbers of these categories.
4. This makes it impossible to combine the three categories for analysis. Charities are more centralised than banks, and community organisations are more dispersed than food shops.

Table I.1 Numbers of organisations in Voluntary and Community sector by settlement bands

Settlement Band	Charity	Community	Voluntary	All organisations *	Population %
Belfast MUA	209	412	531	1203	34.34
Derry UA	19	121	95	236	5.38
Large Towns	61	163	263	501	13.27
Medium Towns	50	113	167	341	5.96
Small Towns	16	62	59	142	6.03
Intermediate	4	34	32	71	3.85
Large Village	8	79	38	126	4.03
Small Village, Hamlet & Open Country	66	425	263	770	27.13
Total	433	1409	1448	3390	100.00

Also includes Consumer Groups, Co-operatives, Credit Unions and Housing Associations

I.2 Correlations of organisations in the Voluntary and Community sector with population

		Pop	Charity	Community	Voluntary
Pop	Pearson Correlation	1	.924(**)	.948(**)	.949(**)
	Sig. (2-tailed)		.000	.000	.000
	N	143	143	143	143
Charity	Pearson Correlation	.924(**)	1	.931(**)	.977(**)
	Sig. (2-tailed)	.000		.000	.000
	N	143	143	143	143
Community	Pearson Correlation	.948(**)	.931(**)	1	.970(**)
	Sig. (2-tailed)	.000	.000		.000
	N	143	143	143	143
Voluntary	Pearson Correlation	.949(**)	.977(**)	.970(**)	1
	Sig. (2-tailed)	.000	.000	.000	
	N	143	143	143	143

** Correlation is significant at the 0.01 level (2-tailed).

I.3 Correlation of numbers of organisations in the Voluntary and Community sector, controlling for population

Control Variables	Organisation	Charity	Community	Voluntary	
Population	Charity	Correlation	1.000	.454	.826
		Significance (2-tailed)	.	.000	.000
		Df	0	140	140
	Community	Correlation	.454	1.000	.698
		Significance (2-tailed)	.000	.	.000
		Df	140	0	140
	Voluntary	Correlation	.826	.698	1.000
		Significance (2-tailed)	.000	.000	.
		Df	140	140	0