

Identifying clusters of potential in South Hampshire



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To obtain copies of the report and ongoing information about cluster development in South East Hampshire please contact the Portsmouth and South East Hampshire Partnership. For further information about technical aspects of this project please contact the authors.

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Identifying clusters of potential in South Hampshire

Introduction:

Following on from work carried out for City Growth Portsmouth (CGP) in 2005 to validate clusters in the City of Portsmouth and the South Hampshire Area Investment Framework (AIF) area¹, the Centre for Local and Regional Economic Analysis (CLREA) has been asked to establish the degree of clustering in the individual districts of Fareham, Gosport and Havant.

The City Growth Concept and its attendant cluster mapping had its roots in the work of Professor Michael Porter², which has subsequently been developed and expanded. Initial research (ICIC)³ identified broadly based clusters, which then required validation and prioritisation using a combination of published secondary data (evidence based framework), augmented by appropriate local knowledge. The definition of the initial clusters is rooted in work carried out by Trends Business Research (TBR) for the Department of Trade and Industry (DTI) in 2000/2001⁴, which identified regional clusters.

The purpose of the current work is firstly to establish the existence of clusters and then define their composition. The initial analysis is based on Annual Business Inquiry (ABI) data for the years 1999 to 2004 and uses the same methodology as the original work for the DTI (TBR 2001)⁵. The methodology employed in this study firstly identifies “high points”. These are SIC sectors that contain at least 0.2% of local employment and have a local concentration ratio, based on standard location quotients (LQ)⁶ of at least 1.25. The depth of firms within the local economy is also identified⁷. In other words, whether or not the cluster depends on just a small number of firms (shallow), more substantially established in the local economy (medium), or more deeply embedded (deep). These “high points” are then matched against the list of clusters established by TBR for CGP, suitably refined and “enriched” by local knowledge. Using this two-stage process a “long list” of key potential clusters in the AIF area and the individual districts is then established.

Finally, clusters are examined to identify those which are already significant in the local economy and growing ahead of the regional average, those that are not yet significant but performing better than the regional average and finally those that are significant but declining faster than the regional average.

¹ Validation of the Leisure and Tourism and the Marine clusters was carried out in April 2005 by CLREA.

² Porter, M E, (1990), *The Competitive Advantage of Nations*, Macmillan, London.

³ Carried out by the Institute for Competitive Inner Cities (ICIC).

⁴ See *Business Clusters in the UK – A first assessment* produced for the Department of Trade and Industry (DTI) by a consortia led by Business Trends research (TBR) in February 2001.

⁵ The TBR analysis used the Inter Departmental Business Register (IDBR) to identify business clusters by the type of activity they undertake. The main advantage of using the IDBR is that it is based on the 5digit Standard Industrial Classification (SIC), which is more refined than the 4digit SIC ABI data commonly used for local economic analysis. For comparability purposes, the current study uses ABI data, which has been rolled forward one year from that used in the CGP validation exercise.

⁶ The location quotient (LQ) measures the local concentration of employment in a particular industrial sector compared with a baseline area. In this case the baseline is the Southeast Region. A figure of 1 indicates that the proportion of all employment in a particular sector (e.g. shipbuilding and repair) is exactly the same as that found in the baseline, a figure <1 suggests that the sector is under-represented locally and a figure >1 that the sector is over-represented locally.

$LQ = (e_i/e_j)/E_i/E_j$ where e_i = local employment; E_i = baseline area employment; i = industry sector; $t = \sum_{i=1}^n i^2 \dots i^n$.

⁷ For this purpose shallow refers to <10 units, medium 10-31 units and deep >31 units in any given SIC locally, deep is equivalent to 0.2% of all units in the AIF area.

Section 1. The AIF Area

Summary - The area

The four local authority areas comprising the AIF area cover an area of 194sq km and are home to just under half a million people. The area's labour supply is 300,000 people of which 230,000 are either employed or self-employed. There are an estimated 245,000 jobs in the local area and the stock of businesses both registered and unregistered may be as high as 27,000. The latest ABI data (2004) estimates that there are 205,800 employees working in 16,250 units (usually individual firms).

The AIF area high points and clusters of potential




In total, 37 Standard Industrial Classifications (SIC) out of 514 separate categories of economic activity fulfil both the concentration and employment criteria (> 410 employees and LQ of 1.249+). A number of manufacturing based sectors are not only significant in terms of employment and concentration, but are also deeply embedded, this suggests competition between local firms, creating the best possible conditions in which firms can be created, survive and thrive. Grouped together these high point clusters suggest a number of clusters of potential including Advanced manufacturing, Aerospace and defence, ICT, Analytical instruments, Pharmaceuticals and Marine.

Size, concentration and employment growth

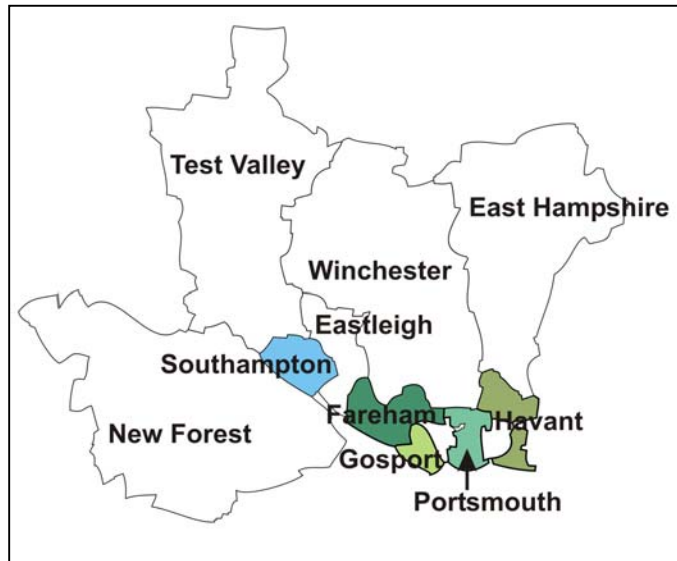
Putting together the information on cluster size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Amongst those that fulfil both criteria are Advanced manufacturing, Aerospace and defence and Marine. A number of other clusters fall below the 1.249 concentration threshold but nevertheless generate significant employment and have grown significantly over the last five years. Almost all the clusters that grew significantly are either service based or local clusters including ICT, Medical devices, Pharmaceuticals and Retail.

Winners, losers and those that may fly

It is possible to identify clusters that may warrant further detailed investigation. These have been classified using a traffic light coding system. The three levels are: **Green** – significant, specialised and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** – significant, specialised but declining faster than the regional average. All clusters account for more than 5,000 jobs. The main results for the AIF area are:

Green		Doing well	None identified, although some significant clusters are declining slower than the regional average
Amber		With potential	Retail, Leisure and tourism, ICT, Education and knowledge, Local retail clothing, Medical devices, Communication equipment and Local construction
Red		Causing concern	Advanced manufacturing and Marine

The AIF area's profile



The Southeast Hampshire AIF area comprises the Portsmouth unitary authority and the non-metropolitan districts of Fareham, Gosport and Havant (see map).

It is estimated that the four local authority areas together cover an area of 194sq km and are home to a population of just under half a million people (ONS)⁸.

As far as economic activity is concerned the Annual Population Survey (APS) estimates that the AIF area's supply of

labour is 300,000 working age residents and that 77% of these (230,000) are either employed or self-employed. On the demand side, there are an estimated 245,000 jobs in the local area, some of which will be filled by local residents and the balance by people commuting in from surrounding areas. The DTI's Small Business service (SBS) estimates that there were 11,325 VAT registered enterprises⁹ in the AIF area at the start of 2005. Given the fact that a large percentage of self-employed and micro businesses are not registered for VAT, the true figure for the stock of local businesses could be as high as 27,000.

Whilst VAT and APS data give an estimate of the total number of jobs and businesses in the local economy they do not provide sufficient sectoral detail to allow clusters to be identified. However, the ABI data sub-divides the economy into 514 different economic activities, based on the main generic products and services produced by companies. The drawback is that the ABI data is heavily influenced by the employment generated by larger companies and thus fails to account as effectively for self-employment and underestimates employment in micro businesses. The latest ABI data (2004) estimates that employment levels in the AIF area are in the region of 205,800 people in 16,250 units¹⁰. Given that the objective is to identify clusters locally, the ABI data, although not perfect, provides the best means of achieving this objective.

The AIF area's "high points"

The ABI 4digit classification sub-divides the economy into 514 separate categories of economic activity, ranging from agriculture to youth hostels and mountain refuges. Within the AIF area 372 individual SIC's recorded some level of employment in 2004. These ranged in size from more than

⁸ Informing our **future** 2006 reports that the office for National Statistics and Government Actuary's Department estimate the population of the AIF area was 497,000 people in 2006.

⁹ VAT registered units are usually individual firms, the threshold for VAT registration in April 2005 was £60,000, It is estimated that only 1.8million of the 4,3million enterprises in the UK are VAT registered.

¹⁰ Units are employment addresses and a company may have more than one unit in the local area, for instance most schools would be "owned" by the local education authority but there may be 20 or more in a local area.

10,000 people to just one. Out of these only 98 individual SIC's fulfilled the employment criteria (more than 0.2% of the workforce, or > 410 people). A further 88 SIC's fulfilled the concentration criteria (LQ of >1.249). In total 37 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Southeast Hampshire AIF "long list" of clusters.

The table below sets out the "high points" ranked by density (number of firms). Fifteen of these "high points" are classified as being "deep".

Table 1 – AIF “high points”				
<i>SIC Class 02</i>	<i>Class Description</i>	<i>Employment</i>	<i>Density</i>	<i>LQ, SE Region base</i>
8514	Other human health activities	3,950	D	1.54
3511	Building and repairing of ships	2,700	D	12.35
3320	Manufacture of instruments and appliances for measuring, checking, etc.	2,050	D	2.30
4531	Installation of electrical wiring and fittings	1,500	D	1.28
5246	Retail sale of hardware, paints and glass	1,400	D	1.26
7032	Management of real estate on a fee or contract basis	950	D	1.64
2852	General mechanical engineering	950	D	1.43
9271	Gambling and betting activities	900	D	2.12
3162	Manufacture of other electrical equipment not elsewhere classified	867	D	2.51
5231	Dispensing chemists	800	D	1.70
2924	Manufacture of other general purpose machinery not elsewhere classified	550	D	1.87
6110	Sea and coastal water transport	500	D	1.52
4545	Other building completion	500	D	1.35
5224	Retail sale of bread, cakes, flour confectionery and sugar confectionery	450	D	1.42
4544	Painting and glazing	450	D	1.28
7511	General (overall) public service activities	6,950	M	2.20
8030	Higher education	6,650	M	1.43
7522	Defence activities	4,600	M	4.32
3530	Manufacture of aircraft and spacecraft	2,700	M	5.33
5139	Non-specialised wholesale of food, beverages and tobacco	1,100	M	1.90
2923	Manufacture of non-domestic cooling and ventilation equipment	1,050	M	3.93
9002	Collection and treatment of other waste	900	M	2.26
2524	Manufacture of other plastic products	850	M	2.17
3002	Manufacture of computers and other information processing equipment	700	M	2.55
9272	Other recreational activities not elsewhere classified	550	M	1.32
3210	Manufacture of electronic valves and tubes and other electronic components	500	M	2.06
5523	Other provision of lodgings not elsewhere classified	450	M	2.04
2452	Manufacture of perfumes and toilet preparations	450	M	1.95
9252	Museum activities and preservation of historical sites and buildings	400	M	1.62
3430	Manufacture of parts and accessories for motor vehicles and their engines	1,350	S	3.37
6603	Non-life insurance	1,300	S	1.46
6323	Other supporting air transport activities	1,200	S	2.54
4013	Distribution and trade in electricity	950	S	4.13
2212	Publishing of newspapers	700	S	3.40
2960	Manufacture of weapons and ammunition	700	S	2.44
1740	Manufacture of made-up textile articles, except apparel	450	S	5.00
2522	Manufacture of plastic packing goods	450	S	3.64

Source: ABI 2004; Note. 1 Employment figures have been rounded to the nearest 50.

Note 2. Firm density; D = >31 units, M = 10-31 units and S = <10 units.

AIF clusters of potential

As shown in Table 1 a number of manufacturing based sectors are not only significant in terms of employment and concentration, but are also deeply embedded in the local economy. In Porter's terms this suggests competition between local firms, creating the best possible business environment in which firms can be created, survive and thrive. Those manufacturing sectors that stand out from Table 1 include Manufacture of aircraft and spacecraft; Manufacture of instruments and appliances for measuring, checking etc. (includes navigation); Manufacture of parts and accessories for motor vehicles; General mechanical engineering and Manufacture of other plastic products. There are also a number of service sectors that are deeply embedded, which include those providing services mainly to local residents and businesses in the AIF area (e.g. Dispensing chemists) and those that serve a wider market (e.g. Sea and coastal water transport).

Utilising the ICIC classifications of clusters it is possible to group the "high points" in Table 1 into potential clusters. Table 2 below shows the "high points" defined in Table 1 grouped into the amended ICIC defined clusters and the total number of jobs emanating from the "high point" sectors alone (where a potential cluster is comprised of a single "high point" it is excluded).

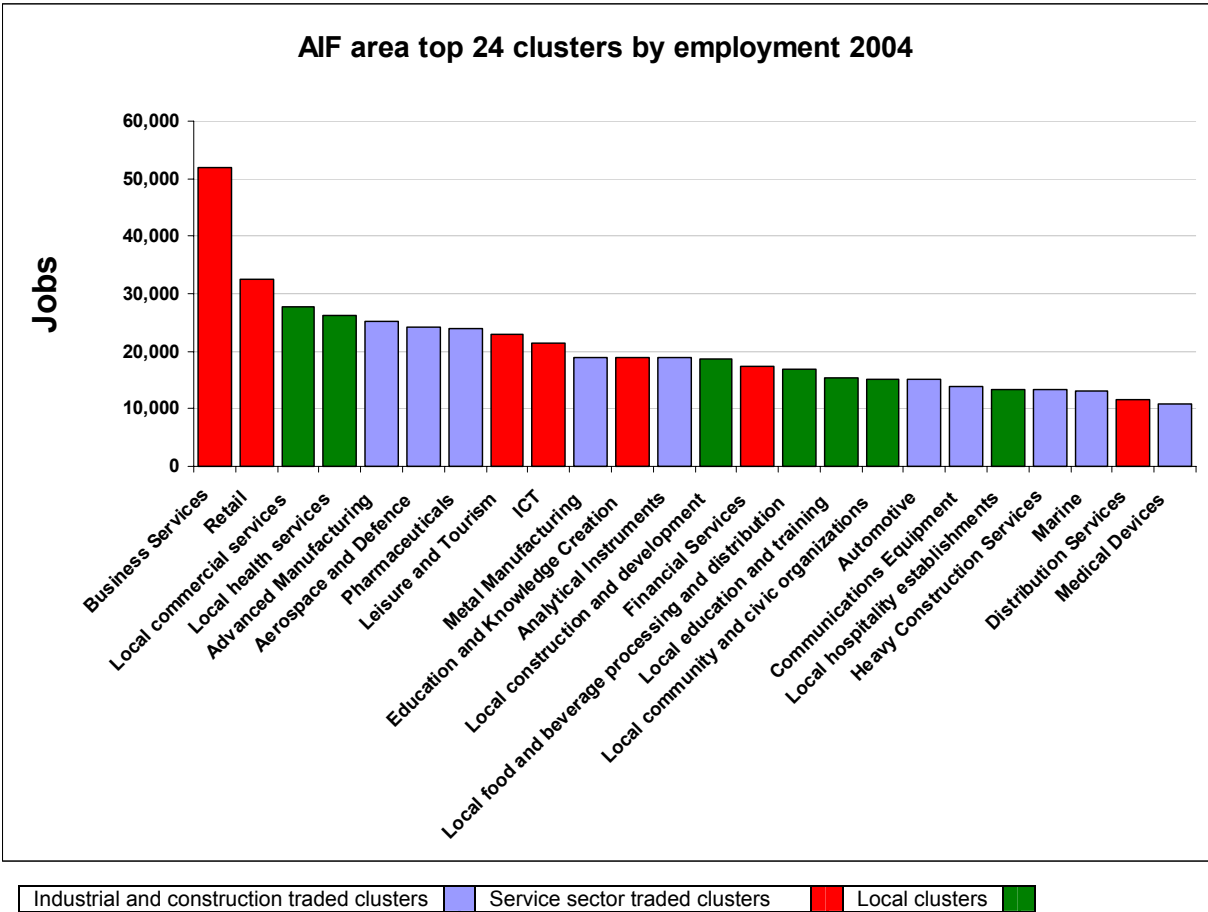
Table 2 "high points" grouped into potential clusters			
<i>Cluster Description</i>	<i>AIF Area "high point" sectors</i>	<i>Employment</i>	<i>No of Units</i>
Traded clusters			
Advanced Manufacturing	2923; 2924; 2960; 3002; 3162; 3210; 3320; 3430; 3530	15,050	200
Aerospace and Defence	2852; 2960; 3002; 3162; 3210; 3511; 3530; 7522	13,650	300
ICT	3002; 3210; 3320; 8030	9,900	100
Analytical Instruments	3002; 3162; 3210; 3320; 7522	9,700	125
Pharmaceuticals	2452; 3320; 8030	9,200	75
Marine	3511; 6110; 7522; 9272	8,300	125
Metal Manufacturing	2852; 2923; 2960; 3162; 3320; 3530	8,250	250
Education and Knowledge Creation	2212; 8030; 9252	7,800	50
Production Technology	2852; 2923; 2924; 2960; 3002; 3320	5,950	225
Building Fixtures, Equipment and Services	1740; 2524; 2852; 2923; 2924; 3320	5,900	275
Motor Driven Products	2923; 2924; 2960; 3002; 3530	5,700	100
Heavy Construction Services	2524; 2852; 2923; 3162; 4531	5,200	450
Automotive	2852; 2924; 3320; 3430	4,900	200
Communications Equipment	3002; 3162; 3210; 3320	4,100	100
Oil and Gas	2524; 3320; 6110	3,400	100
Transportation and Logistics	3430; 6110; 6323	3,000	50
Leisure and Tourism	5523; 6110; 9252; 9271; 9272	2,800	200
Retail	5224; 5231; 5246	2,600	175
Heavy Machinery	2852; 2923; 2924	2,500	175
Power Generation	3002; 3162	1,600	50
Processed Food	2522; 5139	1,600	25
Chemical Products	2452; 2524	1,350	25
Plastics	2522; 2524	1,350	25
Local clusters			
<i>Local construction and development</i>	4531; 4544; 4545; 6603	3,750	525
<i>Local entertainment and media</i>	2212; 9271	1,550	100
<i>Local housing and household goods and services</i>	5139; 5224	1,550	75

Employment rounded to nearest 50, units to nearest 25.

As can be seen from Table 2 some of the potential clusters appear to have a critical mass from just the “high point” sectors, whilst others are spread relatively thinly. In order to identify the “strength in depth” of potential clusters it is necessary review how clusters, in their entirety, perform in terms of employment and concentration. It is to this part of the analysis that we now turn.

The main clusters by size

Whilst it must be remembered that individual SIC sectors may appear in one or more clusters there are, across the AIF area, 24 clusters that might be regarded as highly significant in employment terms. Each of these clusters accounted for more than 10,000 jobs in 2004. As can be seen from the graph below, 17 of the 24 are traded clusters the other 7 are local clusters. Seven of the traded clusters are mainly manufacturing based (Advanced manufacturing, Aerospace and defence, Pharmaceuticals, Metal manufacturing, Analytical instruments, Automotive and Marine). The other ten are mainly service-based clusters such as Retail, Leisure and tourism and ICT.

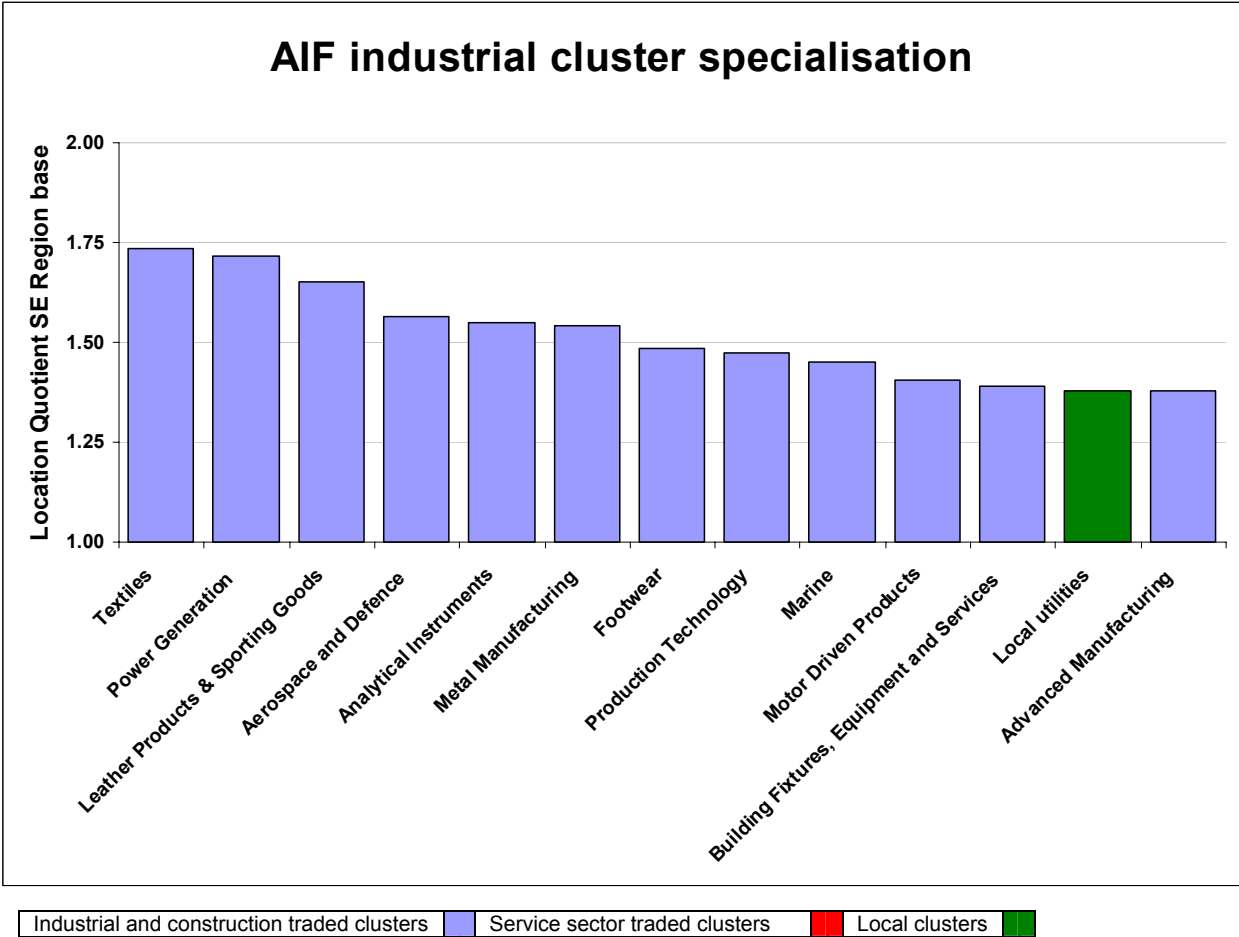


The most significant of the traded clusters are Business services, Retail, Advanced manufacturing, Aerospace and defence, Pharmaceuticals, Leisure and tourism and ICT, each employing more than 20,000 people. The largest local clusters are Local commercial and Local health services. The Local commercial cluster includes both professional services such as architecture, software consultancy, accountancy and legal services as well as manual services such as contract staff and industrial

cleaning. Local health includes hospitals, pharmacies, medical and dental practices, health centres and social work activities including provision of residential care. However, it should be noted that some sectors are likely to appear in both local and traded clusters because it is not possible to differentiate the amount of activity that relies just on local demand.

Significant clusters by concentration

Utilising the employment LQ measure that was previously used to identify individual sector high points, it is possible to rank the most important employment clusters in the AIF area by their concentration. As with individual sectors, those with an LQ greater than 1.249 are identified as being significant and can be expected to export their goods or services beyond the local economy. Again the baseline used is the average employment for each cluster within the Southeast Region.



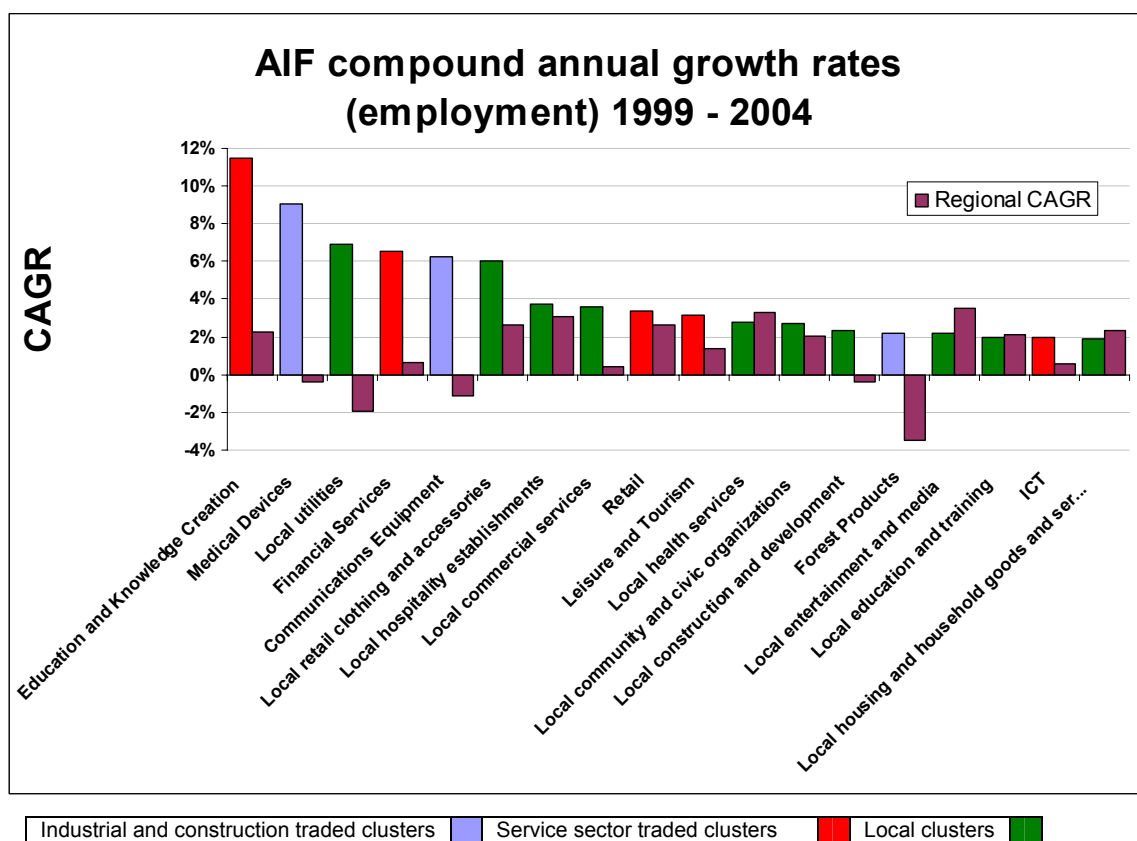
In this case the fact that a cluster has a high LQ doesn't necessarily mean that it generates a large amount of employment and equally a cluster with a lower LQ may well generate significant employment. For instance, Textiles has the highest LQ within the area but generates less than 1,000 jobs whereas Retail produces over 32,000 jobs but has an LQ of only 1.01 (almost exactly the regional average). The most noticeable feature of the graph above is that of the 13 clusters 12 are traded and all of these are manufacturing based.

Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Analytical instruments, Marine and Metal manufacturing. There are however a number of clusters that fall below the 1.249 threshold but nevertheless generate significant employment, within this category are Automotive, ICT, Medical devices, Pharmaceuticals and Retail. The crucial question is whether or not the significant sectors are growing or shrinking in terms of employment and it is to that question that we now turn.

Compound annual growth rates of employment

If clusters are to be the vehicle to drive forward the local economy then the optimal strategy is to invest time and effort in those, which have the most potential to grow. The next part of the analysis examines employment growth rates, comparing the compound annual growth rate (CAGR) locally with that regionally. The graph below shows that 18 of the 54 traded and local clusters have CAGR's of more than 1%.

In some cases the cluster rate of growth contrasts with decline regionally (Medical devices, Local utilities, Communications equipment, Local construction and development and Forest products). In other cases local growth is significantly ahead of that in the region generally most notably in Education and knowledge creation (mainly attributable to software consultancy and supply) Financial services, Retail clothing, Local commercial services, Tourism and leisure and ICT.



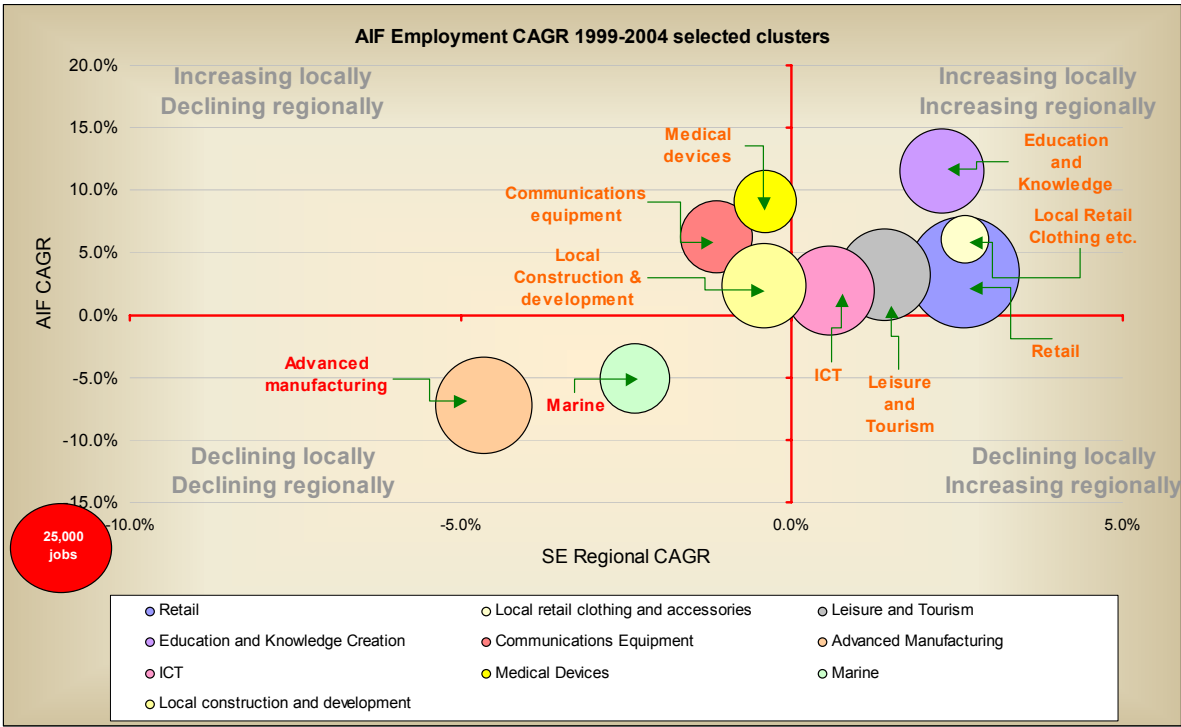
The two most noticeable features about the graph is that none of the clusters with high levels of employment and concentration are on the “short list” and that almost all the clusters with a good growth record are either service based or local clusters. This suggests that at the AIF level there may be a form of “levelling down” going on. Clusters that were previously critical to the local economy are clearly declining, but at the same time are being replaced by jobs in other clusters that were previously under-represented locally, such as Local commercial services, Hospitality and Financial services. In some cases a catch-up process will inevitably be underway.

Drawing together the various strands it is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light type system as follows:

- Green** employment (5,000+), concentrated (LQ 1.25+) and CAGR 1% above regional average
 - Amber** employment (5,000+), concentration 0.85 and 1.24 and CAGR 1% above regional average
 - Red** employment (5,000+), concentrated (LQ 1.25+) but CAGR 1% below regional average
- Note: that clusters with a negative growth rate that is less than the regional decline are not included.*

Winners, losers and those that may fly

The bubble chart below identifies those clusters classified as red, amber or green (as denoted by the colour of the cluster name) and should be studied alongside the cluster summary table (Table 3).



As can be seen there are no green clusters identified on the bubble chart. Two of the more significant clusters (Marine and Advanced manufacturing) fall into the red category, losing jobs at a faster rate than the regional economy. In both cases a major factor in the downturn is the reduction of direct defence employment, although it should be noted that shipbuilding has significantly gained

employment over the same period. In advanced manufacturing the loss of defence jobs is further reinforced by reductions in computer and office equipment wholesale and weapons which more than wipe out the gains from R&D and Instrumentation.

On a more positive note there are a number of clusters in the amber category that have made significant gains in employment terms over the last five years. In the case of Retail, Leisure and tourism, ICT, Education and knowledge and Local retail clothing the clusters are ahead of the positive regional growth trend. On the other hand, clusters such as Medical devices, Communication equipment and Local construction and development are bucking the regional trend, by growing, in employment terms, rather than shrinking. This suggests that there is local consolidation taking place and that they are moving into a period where they might become locally specialised.

In the Retail cluster there is growth across all the main sub-sectors including supermarkets, specialised shops and department stores, clothing, DIY and mail order. In Tourism and leisure the main gains are in sport and leisure and restaurants and bars. Whilst in ICT, Education and knowledge, Medical devices and Communication equipment, the growth process is firmly led by knowledge sectors such as software consultancy, higher and further education and R&D.

Finally, the reason for the lack of high growth specialised clusters in the AIF area is because it is so large and whilst a cluster may be over-represented in one area it may well be under-represented elsewhere leading to a general levelling down. For example, the Marine cluster is highly significant in Portsmouth but hardly shows up on the radar in Havant.

The analysis now moves on to look at the outcomes for the four constituent parts of the AIF area.

Table 3 - AIF clusters summary

Cluster Number	Cluster Description	Employment 2004	Units 2004	LQ, SE Region base	AIF CAGR	SE Region CAGR
Traded clusters						
2	Aerospace and Defence	24,200	1,075	1.566	-0.4%	-3.8%
3	Analytical Instruments	18,800	825	1.550	-1.4%	-3.4%
4	Apparel	3,450	275	1.193	0.5%	0.4%
5	Automotive	15,250	1,325	1.060	-2.7%	-3.0%
6	Building Fixtures, Equipment and Services	6,250	450	1.391	0.3%	-4.2%
7	Business Services	52,000	4,500	0.828	-0.4%	0.4%
8	Chemical Products	5,850	400	0.930	-4.5%	-3.7%
9	Communications Equipment	13,950	825	1.031	6.2%	-1.1%
10	Processed Food	7,600	550	0.913	-1.1%	-0.8%
11	Agricultural Products	1,450	100	0.459	-0.3%	-2.3%
12	Distribution Services	11,500	1,200	0.657	-4.7%	-2.2%
13	Education and Knowledge Creation	18,800	1,450	0.892	11.5%	2.3%
14	Advanced Manufacturing	25,200	1,025	1.379	-7.2%	-4.7%
15	Heavy Machinery	7,600	750	0.986	-0.9%	-3.1%
16	Financial Services	17,450	2,750	0.715	6.5%	0.7%
17	Fishing and Fishing Products	100	50	0.903	-0.9%	-6.3%
18	Footwear	1,900	125	1.483	-0.6%	-3.7%
19	Forest Products	850	75	0.785	2.2%	-3.5%
20	Furniture	3,650	325	1.006	0.7%	-2.7%
21	Heavy Construction Services	13,350	2,075	0.847	0.9%	-1.5%
22	Leisure and Tourism	22,950	1,850	0.979	3.2%	1.4%
23	ICT	21,550	1,275	1.030	1.9%	0.6%
25	Jewellery and Precious Metals	450	75	0.879	-3.4%	-5.9%
26	Leather Products & Sporting Goods	1,550	100	1.652	-0.7%	-7.2%
27	Lighting and Electrical Equipment	2,900	175	1.092	-2.2%	-7.3%
30	Construction Materials	2,800	375	0.665	-2.2%	-2.1%
32	Medical Devices	10,850	575	1.099	9.1%	-0.4%
33	Metal Manufacturing	18,900	1,325	1.540	-2.5%	-4.0%
34	Motor Driven Products	4,900	125	1.404	-2.8%	-4.3%
36	Oil and Gas	9,150	1,125	0.769	-2.8%	-3.4%
39	Pharmaceuticals	23,950	325	1.130	0.1%	1.0%
40	Plastics	5,350	550	1.062	-2.3%	-2.3%
41	Power Generation	4,600	125	1.716	-0.9%	-6.8%
43	Prefabricated Enclosures	1,150	100	0.862	-5.7%	-7.3%
44	Production Technology	8,400	375	1.474	-1.1%	-4.8%
45	Publishing and Printing	2,500	400	0.449	-0.6%	-1.0%
47	Textiles	850	100	1.735	-12.5%	-5.9%
49	Transportation and Logistics	6,850	825	0.718	-1.0%	-3.5%
50	Marine	13,150	800	1.451	-5.1%	-2.4%
51	Retail	32,600	2,600	1.073	3.4%	2.6%
Local clusters						
L1	Local food and beverage processing and distribution	16,850	900	0.992	0.9%	0.9%
L2	Local personal services (non-medical)	1,750	300	0.977	-0.5%	-0.3%
L3	Local health services	26,300	825	1.156	2.8%	3.3%
L4	Local utilities	2,200	50	1.380	6.9%	-1.9%
L5	Local logistical services	5,200	350	0.706	-2.7%	-0.8%
L6	Local housing and household goods and services	9,950	1,450	0.897	1.9%	2.4%
L9	Local personal transportation	3,550	625	0.706	-2.7%	-2.1%
L10	Local retail clothing and accessories	6,650	850	1.006	6.0%	2.6%
L11	Local entertainment and media	3,700	375	1.056	2.2%	3.5%
L12	Local hospitality establishments	13,400	1,125	1.130	3.8%	3.1%
L13	Local commercial services	27,650	3,975	0.757	3.6%	0.5%
L14	Local education and training	15,350	400	1.025	1.9%	2.2%
L15	Local community and civic organizations	15,250	475	1.181	2.7%	2.0%
L16	Local construction and development	18,650	3,075	0.903	2.3%	-0.4%

Note: Traffic light coding: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average.

Section 2. Portsmouth

Summary - The area

Portsmouth covers an area of 40sq km and has a population of approximately 190,000 people (38% of the AIF total). Portsmouth is the most densely populated local authority area in the UK outside of London. The City's labour supply is 121,000 people of which 87,000 are either employed or self-employed. There are an estimated 122,000 jobs in the city and the stock of businesses both registered and unregistered may be as high as 9,300. The latest ABI data (2004) estimates that there are 103,000 employees working in 6,250 units.

The Portsmouth area high points and clusters of potential




In total, 34 SIC's out of 514 separate categories of economic activity fulfil both the concentration and employment criteria (> 210 employees and LQ of 1.249+). A number of larger sectors rely on a small number of large companies and, as a sub-regional city, major administrative and service providers figure prominently. Grouping the high points together suggests a number of clusters with potential these include Business Services, ICT, Aerospace and defence and Leisure and tourism.

Size, concentration and employment growth

Putting together the information on cluster size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Amongst those that fulfil both criteria are Aerospace and defence, Analytical instruments, Marine and Local health services. A number of clusters that fall below the 1.249 concentration threshold have nevertheless grown significantly over the last five years. Almost all the clusters that grew significantly against the regional average are service based including Education and knowledge creation, Financial services, Retail, Local commercial services, Tourism and leisure and ICT.

Winners, losers and those that may fly

It is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light coding system. The three levels are: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average. All clusters account for more than 5,000 jobs. The main results for the Portsmouth area are:

Green 	Doing well	Aerospace and defence, Analytical instruments, Local community and civic organisations
Amber 	With potential	Retail, Leisure and tourism, ICT, Education and knowledge, Medical devices, Communications equipment
Red 	Causing concern	None - but Advanced manufacturing, Business services and Marine have declined faster than the regional average

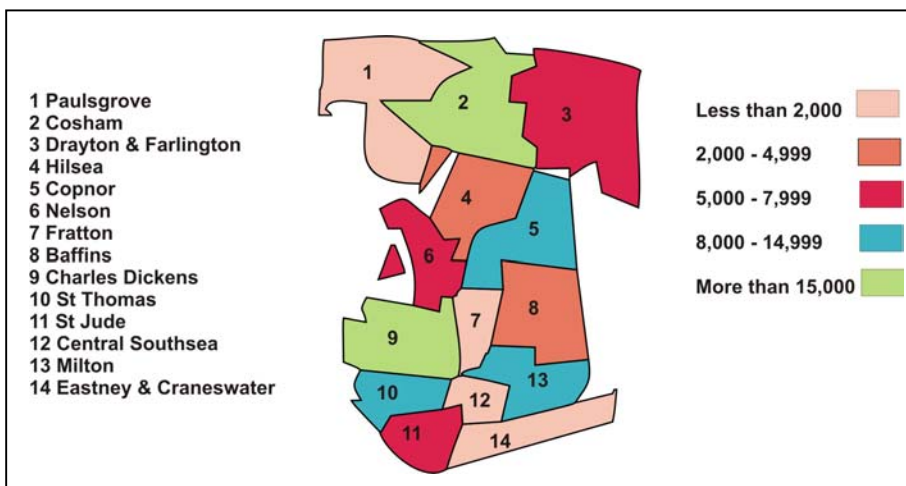
The Portsmouth area profile

In population terms, Portsmouth is the largest of the four district areas, which constitute the AIF area. Although Portsmouth is only 40sq km in area the population is in the region of 190,000 (38% of the AIF total). Portsmouth is the most densely populated local authority area in the UK outside London.

As far as economic activity is concerned the APS estimates that the local supply of labour is 121,000 working age residents of which 93,000 (77%) are economically active and 93% of these (87,000) are either employed or self-employed. On the demand side, there are an estimated 122,000 jobs in Portsmouth, which is around 50% of all jobs in the AIF area. Clearly, Portsmouth is the main generator of employment within the AIF area. The DTI's SBS estimates that there were over 3,900 VAT registered enterprises in Portsmouth at the end of 2004. Given the fact that a large percentage of self-employed and micro businesses are not registered for VAT, the true figure for the stock of local businesses could be as high as 9,300. The latest ABI data (2004) estimates that employment levels in

the Portsmouth area are in the region of 103,000 people in almost 6,250 units (usually individual firms). The number of jobs has increased by over 6,300 (7%) in the last 5 years and the number of units by 5%.

Portsmouth like most other cities has clear



concentrations of employment. The chart above shows that the central business district is located in Charles Dickens ward. This ward is home to much of the Navy, The University, The City Council and most of the Retail capacity and it accounts for more than 25,000 jobs. Cosham is the secondary business centre with over 17,000 jobs, most of which are service jobs in both public and private sectors. Industrial activity is concentrated in 4 wards; Copnor, Charles Dickens, Drayton and Farlington and Hilsea most of these are adjacent to the motorway system. Four other wards also have around 5,000 people employed in services: Milton, Nelson, St Jude and St Thomas. Finally, Paulsgrove, Fratton, Central Southsea and Eastney and Craneswater are mainly residential.

The Portsmouth “high points”

The ABI 4digit classification sub-divides the economy into 514 separate categories of economic activity, ranging from agriculture to youth hostels and mountain refuges. Within Portsmouth 313 individual SIC's recorded some level of employment in 2004. These ranged in size from almost 9,400 (Hospital activities) to just one. Out of these only 85 individual SIC's fulfilled the employment criteria

(more than 0.2% of the workforce, or > 206 people). Whereas 66 SIC's fulfilled the concentration criteria (LQ of >1.249) In total 34 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Portsmouth long list of clusters. Table 4 on the next page sets out the "high points" ranked by density (number of firms). Seven of these "high points" are classified as being "deep" meaning that there are at least 31 units in the individual sector.

There are a number of striking features about Table 4. First, 14 of the 34 individual SIC's were also present in the AIF "long list". Second, of those sectors that appeared in both lists, all of those in Portsmouth provided more than 50% of AIF employment. Third, the list is more heavily biased in favour of service rather than manufacturing sectors, just 26% of the Portsmouth "long list" are manufacturing based whereas in the AIF area the corresponding figure was 43%.

Table 4 – Portsmouth "high points"

<i>SIC Class 02</i>	<i>Class Description</i>	<i>Employment</i>	<i>Density</i>	<i>LQ, SE Region base</i>
7222	Other software consultancy and supply	3,687	D	1.59
5530	Restaurants	3,300	D	1.38
8532	Social work activities without accommodation	3,100	D	1.47
5242	Retail sale of clothing	1,650	D	1.30
4531	Installation of electrical wiring and fittings	750	D	1.31
9271	Gambling and betting activities	600	D	2.96
7032	Management of real estate on a fee or contract basis	450	D	1.56
8511	Hospital activities	9,400	M	1.99
7511	General (overall) public service activities	4,900	M	3.08
8030	Higher education	4,450	M	1.91
7522	Defence activities	2,350	M	4.42
8514	Other human health activities	2,000	M	1.54
3320	Manufacture of instruments and appliances for measuring, checking, etc.	1,650	M	3.74
6110	Sea and coastal water transport	450	M	2.77
5231	Dispensing chemists	400	M	1.78
9272	Other recreational activities not elsewhere classified	400	M	1.86
9252	Museum activities and preservation of historical sites and buildings	300	M	2.38
2523	Manufacture of builders ware of plastic	300	M	2.02
6321	Other supporting land transport activities	200	M	1.99
3511	Building and repairing of ships	2,550	S	23.71
3530	Manufacture of aircraft and spacecraft	1,350	S	5.39
6603	Non-life insurance	1,050	S	2.31
9002	Collection and treatment of other waste	696	S	3.51
2212	Publishing of newspapers	650	S	6.69
4013	Distribution and trade in electricity	550	S	4.70
6521	Financial leasing	300	S	3.65
7530	Compulsory social security activities	300	S	1.37
1551	Operation of dairies and cheese making	273	S	10.84
7486	Call centre activities	250	S	2.47
3120	Manufacture of electricity distribution and control apparatus	250	S	1.46
6311	Cargo handling	250	S	7.41
5114	Agents involved in the sale of machinery, industrial equip. ships and aircraft	250	S	2.64
3001	Manufacture of office machinery	200	S	5.69
2121	Manufacture of corrugated paper and paperboard and paper containers etc	200	S	2.71

Source: ABI 2004; Note. 1 Employment figures have been rounded to the nearest 50.

Note 2. Firm depth; D = >31 units, M = 10-31 units and S = <10 units.

With fewer sectors deeply embedded a number of high concentration and employment sectors are often dependant on very few companies for their foothold in the local economy. Those that stand out include Building and repairing of ships, Non-life insurance and Publishing of newspapers. As might be expected from a sub-regional city, major administrative and service providers figure prominently. These include Hospital activities, General public service activities, Higher education and Social work activities. Given Portsmouth's tourism and leisure profile, it is also not surprising to see sectors such as Restaurants, Other recreational activities and Museum activities featured.

Portsmouth clusters of potential

Utilising the ICIC classifications of clusters it is possible to group the "high points" in Table 4 into potential clusters. Table 5 below shows the "high points" defined in Table 4 grouped into the amended ICIC defined clusters and the total number of jobs emanating from the "high point" sectors alone (where a potential cluster is comprised of a single "high point" it is excluded).

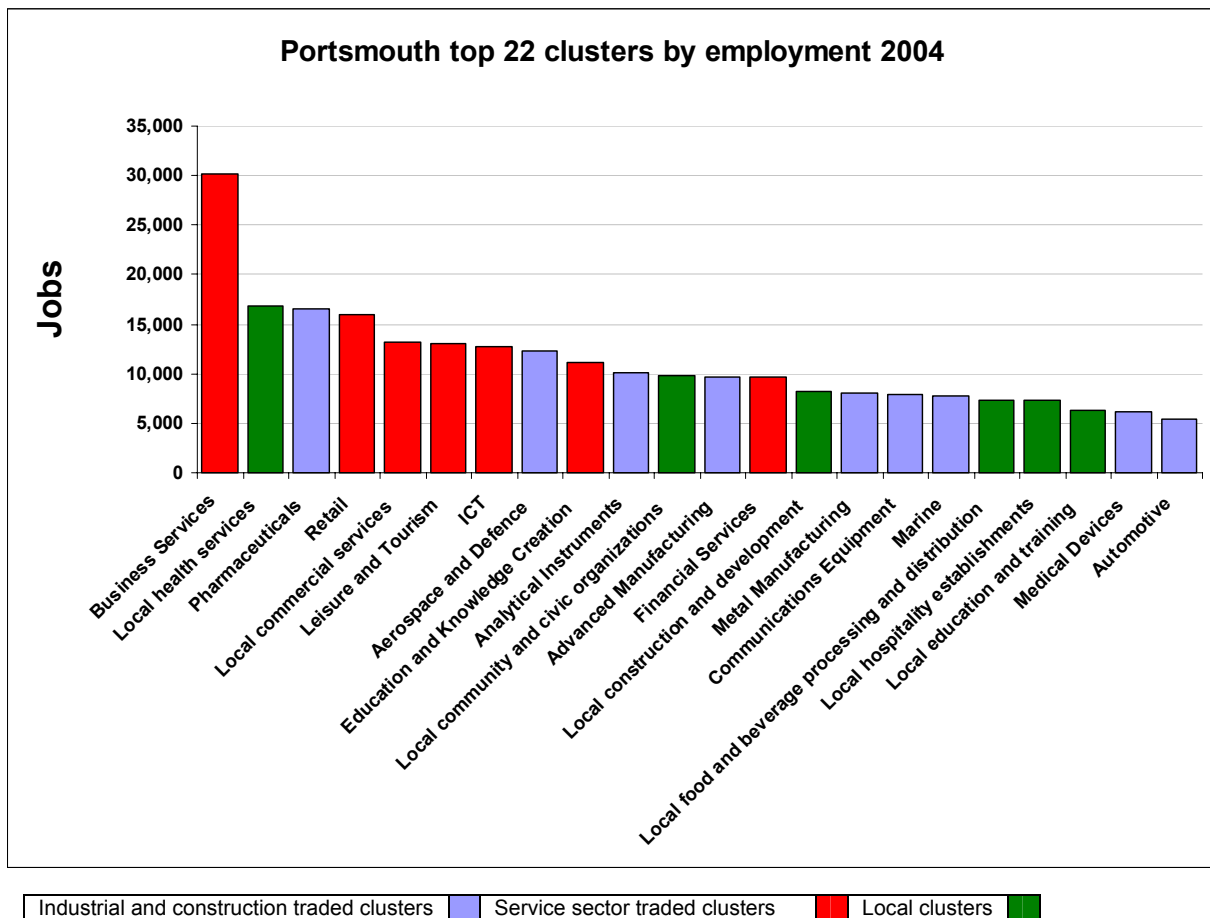
Table 5 "high points" grouped into potential clusters			
<i>Cluster Description</i>	<i>Portsmouth Area "high point" sectors</i>	<i>Employment</i>	<i>No of Units</i>
Traded clusters			
Pharmaceuticals	3320; 8030; 8511	15,500	50
Business Services	6110; 6521; 7032; 7222; 7486; 8511; 9002	15,150	225
Aerospace and Defence	3120; 3511; 3530; 5114; 7222; 7522	10,500	175
ICT	3001; 3320; 7222; 8030	10,000	150
Education and Knowledge Creation	2212; 7222; 8030; 9252	9,100	150
Marine	3511; 6110; 6311; 7522	6,000	50
Advanced Manufacturing	3001; 3120; 3320; 3530; 7522	5,850	50
Retail	5231; 5242; 5530; 6311	5,600	425
Communications Equipment	3320; 7222; 7486	5,550	150
Analytical Instruments	3320; 7222; 7522	5,350	150
Leisure and Tourism	5530; 6110; 6321; 9252; 9271; 9272	5,300	400
Financial Services	6521; 6603; 7222; 7486	5,250	150
Metal Manufacturing	3001; 3320; 3530	3,250	25
Oil and Gas	3320; 6110	2,100	50
Transportation and Logistics	6110; 6311; 6321	900	25
Local clusters			
<i>Local health services</i>	<i>5231; 8511; 8514; 8532</i>	<i>14,900</i>	<i>200</i>
<i>Local community and civic organizations</i>	<i>7511; 7530; 8532</i>	<i>8,300</i>	<i>150</i>
<i>Local construction and development</i>	<i>4531; 6603</i>	<i>1,800</i>	<i>75</i>
<i>Local entertainment and media</i>	<i>2212; 9271</i>	<i>1,300</i>	<i>50</i>
<i>Local utilities</i>	<i>4013; 9002</i>	<i>1,250</i>	<i>-</i>

Employment rounded to nearest 50, units to nearest 25, - signifies <13.

As can be seen from Table 5 some of the potential clusters appear to have a critical mass from just the "high point" sectors (e.g. Business Services, ICT), whilst others are spread relatively thinly (e.g. Transportation and logistics, Local utilities). In order to identify the "strength in depth" of potential clusters it is necessary to review how clusters in their entirety perform in terms of employment, concentration and growth. It is to this part of the analysis that we now turn.

The main Portsmouth clusters by size

Whilst it must be remembered that individual SIC sectors may appear in one or more clusters there are across the Portsmouth area 22 clusters that might be regarded as highly significant in employment terms. Each of these clusters accounted for more than 5,000 jobs in 2004. As can be seen from the graph on the next page, 15 of the 22 are traded clusters the other 7 are local clusters. Nine of the traded clusters are mainly manufacturing based (Advanced manufacturing, Aerospace and defence, Pharmaceuticals, Metal manufacturing, Analytical instruments, Communications equipment, Marine, Medical devices and Automotive). The other six are mainly service-based clusters such as Business services, Retail, Leisure and tourism and ICT.

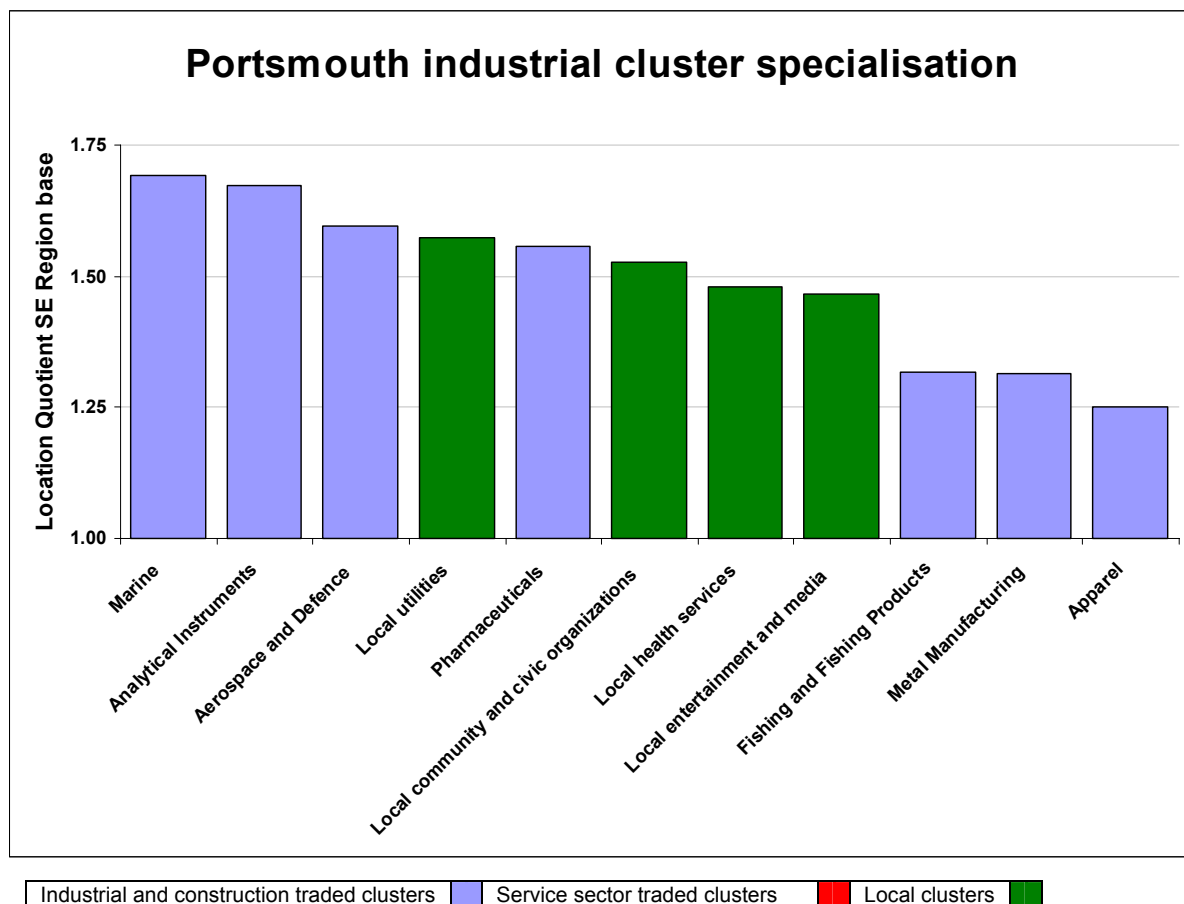


The most significant of the traded clusters Business services, Pharmaceuticals, Retail, Leisure and tourism and ICT, Aerospace and defence, Education and knowledge creation and Analytical instruments, each employ more than 10,000 people. The largest local clusters are Local health and commercial services. The former includes hospitals, pharmacies, medical and dental practices, health centres and social work activities including provision of residential care. The latter includes both professional services such as architecture, software consultancy, accountancy and legal services as well as manual services such as contract staff and industrial cleaning. However, it should be noted that some sectors are likely to appear in both local and traded clusters because it is not possible to

differentiate the amount of activity that relies purely on local demand, this is particularly true with some Business and Local commercial services.

Significant Portsmouth clusters by concentration

Utilising the employment LQ measure that was previously used to identify individual sector high points, it is possible to rank the most important employment clusters in Portsmouth by their concentration. As with individual sectors, those with an LQ greater than 1.249 are identified as being significant and can be expected to export their goods or services beyond the local economy. Again the baseline used is the average employment for each cluster within the Southeast Region.



In this case the fact that a cluster has a high LQ doesn't necessarily mean that it generates a large amount of employment and equally a cluster with a lower LQ may well generate significant employment. For instance, Fishing and fishing products has an LQ of 1.32 (32% above the Southeast average) but generates less than 100 jobs whereas Retail produces over 16,000 jobs but has an LQ of 1.05 (only five percentage points above the regional average). The most noticeable feature of the graph above is that of the 11 clusters 4 are local, this is significantly different from the overall picture of the AIF area where almost all were manufacturing based. This reinforces the earlier finding of the individual high points that Portsmouth 's specialisation is as a sub-regional administration and supply

centre with the agglomeration¹¹ effect typical of larger cities. The other notable factor is that four of the top five sectors owe at least part of their concentration to the presence of public or quasi-public institutions, in the case of Marine, Analytical Instruments and Aerospace this is driven by direct defence employment. In the case of Pharmaceuticals this is heavily influenced by Hospitals and Higher education the former as the end user and the latter as a supplier of research and graduate level staff.

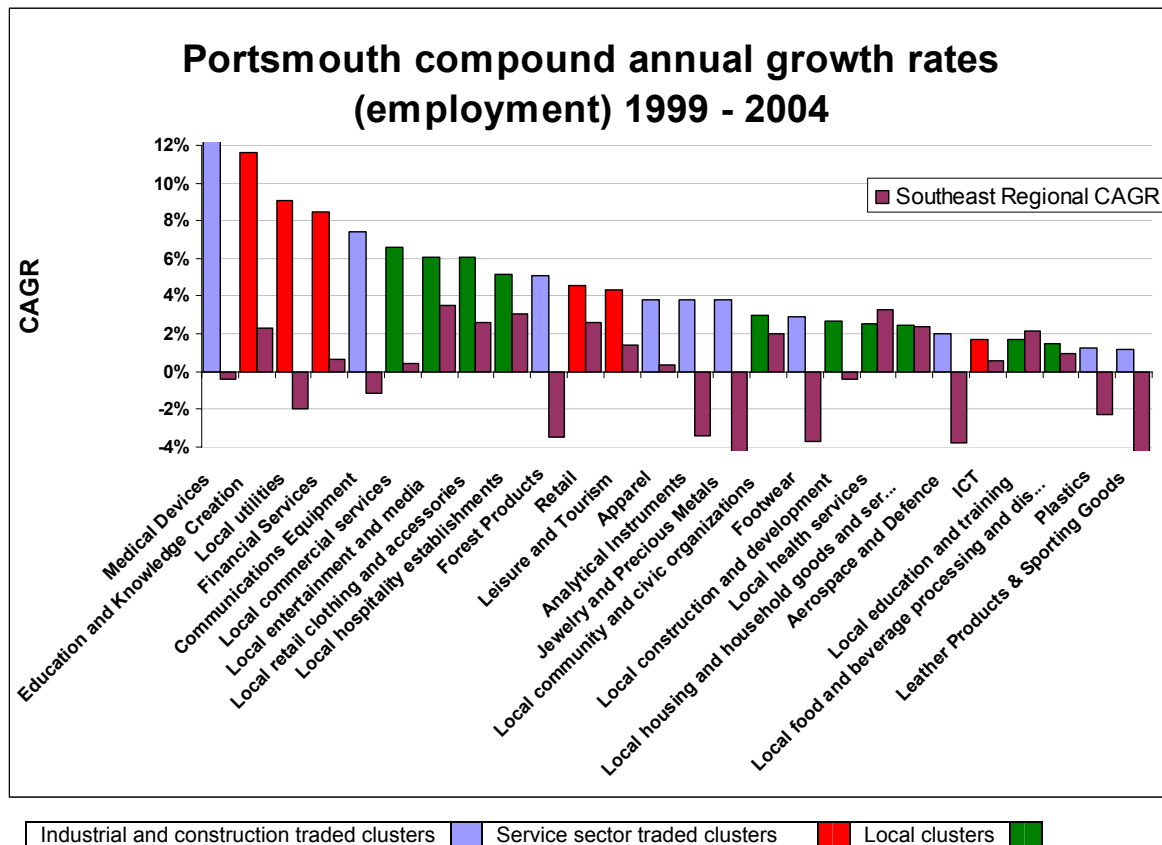
Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in both size and concentration. Those that fulfil both criteria are Aerospace and defence, Analytical instruments, Marine and Metal manufacturing, Pharmaceuticals and Local health services. There are, however, a number of clusters that fall below the 1.249 threshold but nevertheless generate significant employment. Amongst this category are Advanced manufacturing, ICT, Communications equipment, Education and knowledge, Leisure and tourism and Retail. The crucial question is whether or not these sectors are growing or shrinking in terms of employment and it is to that question that we now turn.

Portsmouth's compound annual growth rates of employment

If clusters are to be used to drive forward the local economy then the optimal strategy is to invest time and effort in those, which have the most potential to grow. The next part of the analysis examines employment growth rates comparing the compound annual growth rate (CAGR) locally with that regionally. The graph below shows that 26 of the 54 traded and local clusters have CAGR's of more than 1% per annum, a far higher number than for the AIF in general.

In eleven cases the cluster rate of growth contrasts with decline regionally (e.g. Medical devices, Local utilities, Communications equipment, Analytical instruments, Aerospace and defence, Local construction and development and Plastics). In other cases local growth is significantly ahead of that in the region generally this is most notable in Education and knowledge creation, Financial services, Retail, Local commercial services, Tourism and leisure and ICT. Interestingly, local health services and education and training show positive growth but lag behind the regional growth rate. Only two of the six clusters that have high levels of employment (10,000+) and concentration (LQ >1.25) are featured in the graph and in both cases the cluster is declining regionally. More importantly, those clusters that show growth both locally and regionally are almost exclusively service sector based. This suggests two processes are occurring almost simultaneously, a significant level of growth in services and a consolidation (or decline) in some of the more traditional manufacturing clusters. This change mirrors that occurring nationally, with many traditional (and high tech) manufacturing clusters facing a squeeze as activities are moved offshore whilst those remaining in the UK consolidate into fewer specialised locations.

¹¹ The agglomeration effect is the presence of a critical mass of non-related business sectors that service other industrial sectors indirectly. Typically these include professional business support, administration, transport etc.



Drawing together the various strands it is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light system as follows:

Green employment (5,000+), concentrated (LQ 1.25+) and CAGR 1% above regional average

Amber employment (5,000+), concentration ratio 0.85 – 1.24 and CAGR 1% above regional average

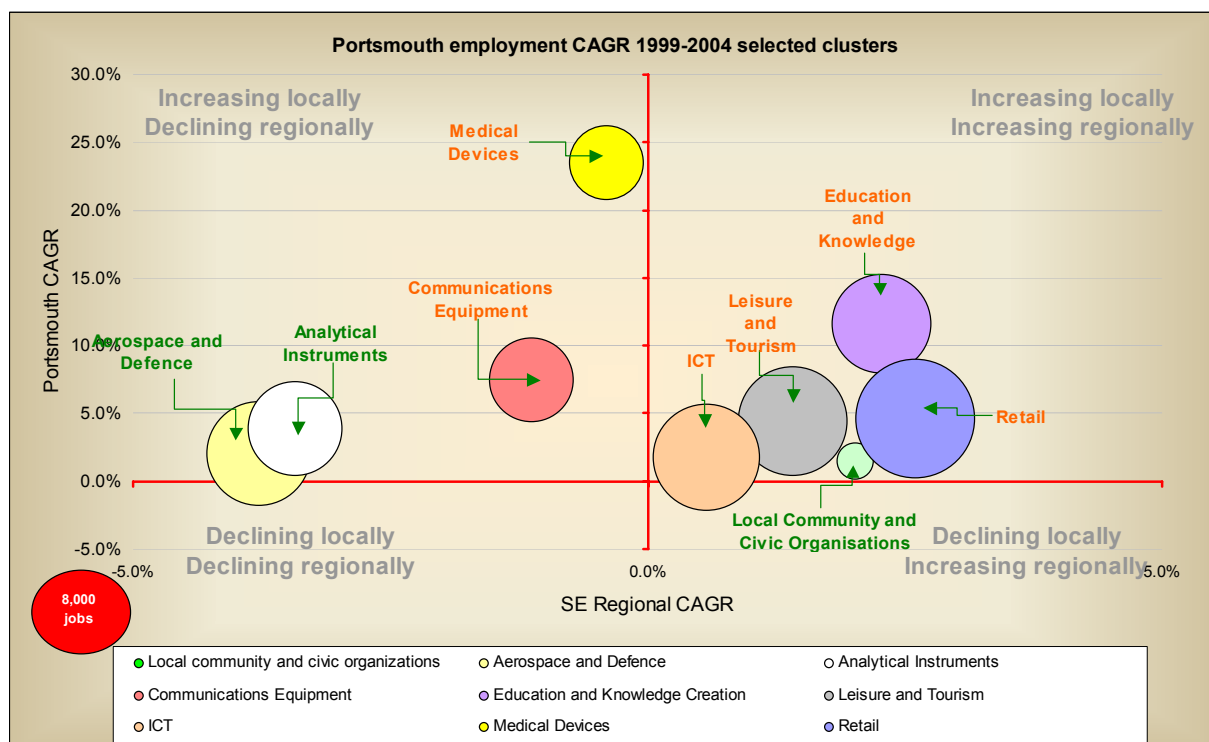
Red employment (5,000+), concentrated but CAGR 1% below regional average

Note: clusters with a negative growth rate that is less than the regional decline are not included.

Portsmouth winners, losers and those that may fly

The bubble chart on the next page identifies those clusters classified as red, amber or green and should be studied alongside the cluster summary table (Table 6).

As can be seen there are no red clusters identified on the bubble chart. Three clusters fall into the green category (Aerospace and defence, Analytical instruments and Local community and civic organisations). In the case of the first two, their CAGR is positive locally whereas regionally it is negative in the latter growth is 1% above the increasing regional average. In both manufacturing clusters the major factor driving growth has been the expansion in Software consultancy and supply (+3,500), this has more than compensated for the downturn in direct defence employment and in the case of Aerospace and defence has been further aided by growth in Shipbuilding (+800) R&D (+400) and Aircraft and Spacecraft (+150). In the case of Local community and civic organisations the majority of the growth is from General public administration and Social work activity (without accommodation).



Perhaps more significantly there are a number of clusters in the amber category these have made significant gains in employment terms. In the case of Retail, Leisure and tourism, ICT and Education and knowledge the clusters are ahead of the positive regional growth trend. On the other hand, the Medical devices and Communications equipment clusters are bucking the regional trend, by growing, in employment terms, rather than shrinking. At the present rate of progress it is likely that ICT, Medical devices, and Communication equipment clusters will become locally specialised (LQ >1,25) in a few years. Whilst Leisure and tourism is a little further behind, it could become locally specialised in the next three to four years, if current growth trends continue. Education and knowledge and Retail are further behind but have made good progress in recent years.

In the Retail cluster growth is across all the main sub-sectors including Supermarkets, Specialised shops and Department stores, Clothing and DIY and in Tourism and leisure the main gains are in Sport and leisure, Restaurants and Bars, incidentally Restaurants are common to both clusters. Whilst in ICT, Education and knowledge, Medical devices and Communication equipment, the growth process is firmly led by knowledge sectors such as Software consultancy, Higher and further education and R&D.

There are three other important clusters for Portsmouth that fall outside the traffic light system used to identify potential growth sectors. These are Marine, Business services and Advanced manufacturing. In Marine although employment levels have fallen on average by 3% per annum during the last five years, it bounced back last year with a net gain of nearly 650 jobs. This improvement mainly comes from Shipbuilding where numbers are now higher than at any time since 1998. The cluster remains significant (in concentration and employment terms) but has lost jobs faster than the regional average

over the last five years. The cluster will need to diversify further away from its MoD reliance if it is to arrest this slow decline and continue as a mainstay of the local economy into the future.

From an entirely different perspective, Business services remains under represented (LQ 0.96) and has lost jobs in Portsmouth compared with a slight gain regionally. The main reason is the export of jobs either to other locations in the UK or offshore, this is evident across a wide range of functions including Database activities, Finance and banking, Road transport, Industrial cleaning and Professional services. The most likely explanation is the pressure on scarce commercial space and the likely effect this will have on price. Portsmouth desperately needs more attractive, modern commercial premises if it is to hang on to the kind of business service cluster usually associated with a major regional city, otherwise these activities will migrate to surrounding locations where rents are more affordable and communication easier.

On the face of it advanced manufacturing has been losing jobs faster than the regional average, however on closer inspection this is not as bad as it seems. First the reduction in employment of its largest customer, defence, is included and this tends to skew the data. Second there has been a definitional switch in computing from wholesale of computer equipment and software, to software consultancy and supply. In other words most of these jobs are still there but have switched to another cluster, ICT.

The overall outlook for the City of Portsmouth is buoyant. Whilst still very dependent on the public sector in general, and the MoD in particular the face of the economy is changing. Service sector employment is growing and high-tech related manufacturing and service sectors are also expanding. Perhaps more importantly the Retail cluster has not only crossed the Rubicon and is firmly on the specialised side of the regional benchmark but it is growing faster than the regional average. Given plans for additional retail capacity in the Northern Quarter and the possibility of developing a complementary niche in Southsea this suggests further growth to come and the possibility that Portsmouth will become a sub-regional centre in its own right challenging the hegemony of other cities such as Brighton, Guildford and Southampton.

Table 6 – Portsmouth clusters summary

Cluster Number	Cluster Description	Employment 2004	Units 2004	LQ, SE Region base	Portsmouth CAGR	SE Region CAGR
Traded clusters						
2	Aerospace and Defence	12,350	350	1.596	2.0%	-3.8%
3	Analytical Instruments	10,150	275	1.672	3.8%	-3.4%
4	Apparel	1,800	150	1.251	3.8%	0.4%
5	Automotive	5,500	475	0.761	-3.9%	-3.0%
6	Building Fixtures, Equipment and Services	2,300	125	1.019	0.4%	-4.2%
7	Business Services	30,150	1,650	0.959	-1.1%	0.4%
8	Chemical Products	1,850	125	0.590	-7.4%	-3.7%
9	Communications Equipment	7,950	275	1.174	7.4%	-1.1%
10	Processed Food	2,700	250	0.645	-4.9%	-0.8%
11	Agricultural Products	550	25	0.346	-3.9%	-2.3%
12	Distribution Services	4,850	425	0.554	-11.6%	-2.2%
13	Education and Knowledge Creation	11,100	475	1.053	11.6%	2.3%
14	Advanced Manufacturing	9,650	300	1.054	-9.9%	-4.7%
15	Heavy Machinery	2,000	200	0.522	0.2%	-3.1%
16	Financial Services	9,650	1,000	0.789	8.4%	0.7%
17	Fishing and Fishing Products	100	25	1.318	0.3%	-6.3%
18	Footwear	650	75	1.017	2.9%	-3.7%
19	Forest Products	350	25	0.659	5.1%	-3.5%
20	Furniture	1,350	125	0.736	-0.3%	-2.7%
21	Heavy Construction Services	3,900	625	0.497	-1.3%	-1.5%
22	Leisure and Tourism	13,050	900	1.112	4.4%	1.4%
23	ICT	12,700	444	1.212	1.7%	0.6%
25	Jewellery and Precious Metals	200	25	0.805	3.8%	-5.9%
26	Leather Products & Sporting Goods	450	50	0.926	1.2%	-7.2%
27	Lighting and Electrical Equipment	1,050	75	0.807	-3.0%	-7.3%
30	Construction Materials	1,200	125	0.583	-4.0%	-2.1%
32	Medical Devices	6,150	200	1.244	23.5%	-0.4%
33	Metal Manufacturing	8,050	375	1.314	-1.3%	-4.0%
34	Motor Driven Products	700	50	0.409	-15.3%	-4.3%
36	Oil and Gas	4,150	375	0.701	-2.8%	-3.4%
39	Pharmaceuticals	16,550	100	1.558	1.0%	1.0%
40	Plastics	1,800	200	0.717	1.3%	-2.3%
41	Power Generation	850	50	0.639	-1.0%	-6.8%
43	Prefabricated Enclosures	350	25	0.498	-1.6%	-7.3%
44	Production Technology	2,950	125	1.044	-4.6%	-4.8%
45	Publishing and Printing	1,600	150	0.576	-0.5%	-1.0%
47	Textiles	200	25	0.876	-12.1%	-5.9%
49	Transportation and Logistics	3,000	325	0.623	-4.0%	-3.5%
50	Marine	7,700	250	1.693	-3.2%	-2.4%
51	Retail	15,950	1,200	1.047	4.6%	2.6%
Local clusters						
L1	Local food and beverage processing and distribution	7,350	350	0.867	1.5%	0.9%
L2	Local personal services (non-medical)	700	125	0.807	0.3%	-0.3%
L3	Local health services	16,850	350	1.479	2.6%	3.3%
L4	Local utilities	1,250	25	1.573	9.1%	-1.9%
L5	Local logistical services	2,850	125	0.771	-2.7%	-0.8%
L6	Local housing and household goods and services	4,650	600	0.841	2.4%	2.4%
L9	Local personal transportation	1,800	250	0.721	0.7%	-2.1%
L10	Local retail clothing and accessories	3,700	400	1.112	6.0%	2.6%
L11	Local entertainment and media	2,550	150	1.465	6.1%	3.5%
L12	Local hospitality establishments	7,350	575	1.238	5.1%	3.1%
L13	Local commercial services	13,250	1,400	0.725	6.6%	0.5%
L14	Local education and training	6,250	150	0.835	1.7%	2.2%
L15	Local community and civic organizations	9,900	250	1.528	3.0%	2.0%
L16	Local construction and development	8,200	1,050	0.790	2.7%	-0.4%

Note: Traffic light coding: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average.

Section 3. Havant

Summary - The area

Havant covers an area of 55sq km and has a population of approximately 117,000. The district's labour supply is 67,000 people of whom 54,000 are either employed or self-employed. There are an estimated 45,000 jobs in the district and the stock of businesses both registered and unregistered may be as high as 7,000. The latest ABI data (2004) estimates that there are 40,000 employees working in 4,000 units. The number of jobs has increased by over 2,700 in the last 5 years and the number of units by 8%. There is still considerable out-commuting to satisfy the demand for work.

The Havant area's high points and clusters of potential




In total 32 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Havant long list of clusters. Six of these "high points" are classified as being "deep". These include one manufacturing sector (General mechanical engineering), one in construction (Installation of electrical wiring and fittings) and four in services. Grouping the high points together suggest a number of clusters of potential, these include Aerospace and defence, Automotive, Metal manufacture and Retail.

Size, concentration and employment growth

Putting together the information on cluster size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Analytical instruments, Automotive, Retail and Metal manufacturing. There are however, a number of clusters that fall below the 1.249 threshold, but nevertheless generate significant employment, amongst this category are Communications equipment, ICT, Heavy construction and Local health services. Generally speaking growth in Havant is not simply confined to service sector based clusters, this is different to the national picture where manufacturing is facing a squeeze.

Winners, losers and those that may fly

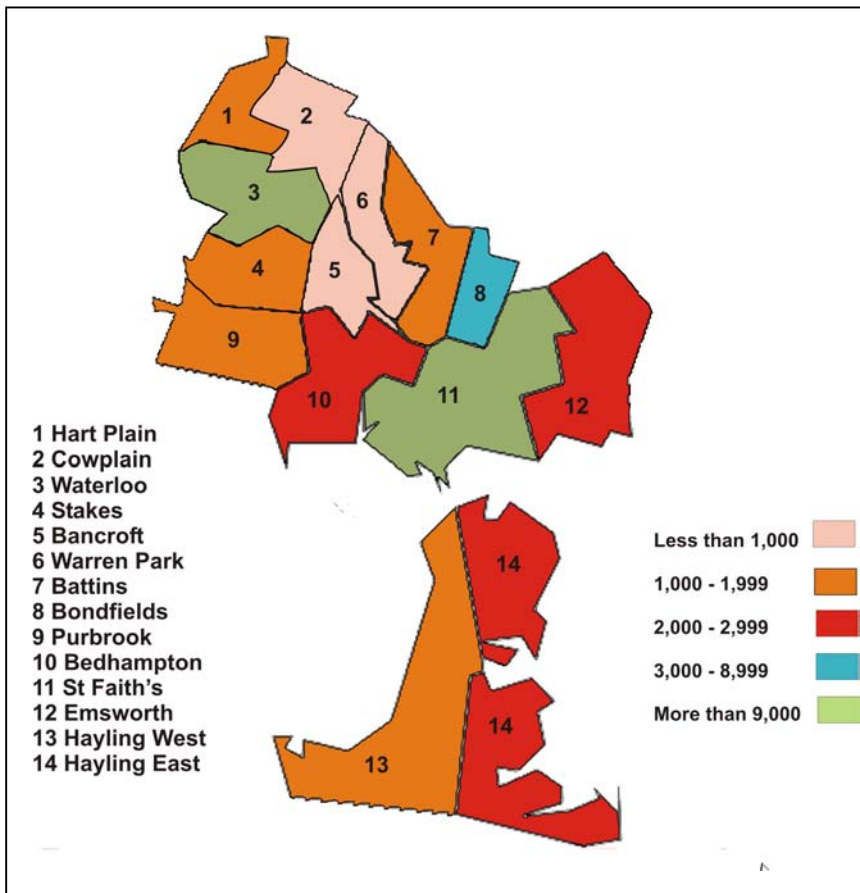
It is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light coding system. The three levels are: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average. All cluster account for more than 2,500 jobs. The main results for Havant area are:

Green		Doing well	Analytical instruments, Retail
Amber		With potential	Leisure and tourism, Communications equipment, Heavy construction services, Local health services
Red		Causing concern	Automotive

The Havant area profile

Havant is the second largest of the four district areas, which constitute the AIF area, both in population and area terms. It covers an area of 55sq km (more than twice the size of Gosport) and has a population of 117,000.

As far as economic activity is concerned, the APS estimates that the local supply of labour is almost 67,000 working age residents. Of these 55,000 (83%) are economically active and 97% of these (54,000) are either employed or self-employed. On the demand side, there are an estimated 45,000 jobs in Havant, which is around 18% of all jobs in the AIF area. Clearly, Havant does not currently have enough jobs to satisfy local demand and therefore a significant proportion of the workforce (more than 16%) will have to commute out of the Borough to work. The DTI's SBS estimates that there were almost 3,000 VAT registered enterprises in Havant at the end of 2004. Given the fact that a large percentage of self-employed and micro businesses are not registered for VAT the true figure for the stock of local businesses could be as high as 7,000. The latest ABI data (2004) estimates that employment levels in Havant are in the region of 40,000 people in almost 4,000 units (usually individual firms). The number of jobs has increased by over 2,700 (7%) in the last 5 years and the number of units by 8%.



As can be seen from the map opposite, the main concentrations of employment are in St Faith's and Waterloo wards. The former accounts for around 11,300 jobs and the latter 9,100. Both these wards are on the main highway network with the A27 trunk road serving St Faith's and the A3M Waterloo. Smaller secondary employment areas include, Bondfields (to the north of the town centre) Bedhampton, Emsworth and Hayling East. The main industrial concentrations are in Bondfields, St Faith's and Waterloo. Those wards with

very little commercial activity are Cowplain, Bancroft and Warren Park.

Havant area's "high points"

Within the Havant area 282 individual SIC's recorded some level of employment in 2004. These ranged in size from more than 3,000 people to just one. Out of these 60 individual SIC's fulfilled the employment criteria (more than 200 people), a further 85 fulfilled the concentration criteria (LQ of >1.249). In total 32 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Havant long list of clusters. Table 7 on the next page sets out the "high points" ranked by density (number of firms). Six of these "high points" are classified as being "deep". These include one manufacturing sector (General mechanical engineering), one in construction (Installation of electrical wiring and fittings) and four in services. The SIC's classified as medium are all service sectors and almost all the manufacturing sectors are classified as shallow.

Table 7 – Havant "high points"

SIC Class 02	Class Description	Employment	Density	LQ, SE Region base
5211	Retail sale in non-specialised stores with food, beverages or tobacco predominating	3,050	D	1.61
8010	Primary education	2,150	D	1.40
8531	Social work activities with accommodation	950	D	1.28
7260	Other computer related activities	500	D	2.12
4531	Installation of electrical wiring and fittings	450	D	1.90
2852	General mechanical engineering	250	D	2.01
8514	Other human health activities	1,500	M	2.97
5246	Retail sale of hardware, paints and glass	500	M	2.31
9261	Operation of sports arenas and stadiums	300	M	1.51
7032	Management of real estate on a fee or contract basis	250	M	2.36
5231	Dispensing chemists	200	M	2.35
5244	Retail sale of furniture, lighting equipment and household articles not elsewhere classified	200	M	1.67
5247	Retail sale of books, newspapers and stationery	200	M	1.52
8030	Higher education	1,450	S	1.59
3002	Manufacture of computers and other information processing equipment	600	S	11.15
3162	Manufacture of other electrical equipment not elsewhere classified	600	S	9.16
2442	Manufacture of pharmaceutical preparations	600	S	3.87
2960	Manufacture of weapons and ammunition	550	S	10.17
3430	Manufacture of parts and accessories for motor vehicles and their engines	550	S	6.75
2524	Manufacture of other plastic products	500	S	6.75
5523	Other provision of lodgings not elsewhere classified	400	S	9.17
4013	Distribution and trade in electricity	400	S	9.15
2971	Manufacture of electric domestic appliances	350	S	16.00
2923	Manufacture of non-domestic cooling and ventilation equipment	350	S	6.64
1740	Manufacture of made-up textile articles, except apparel	300	S	18.10
2912	Manufacture of pumps and compressors	300	S	5.22
2122	Manufacture of household and sanitary goods and of toilet requisites	250	S	12.18
2452	Manufacture of perfumes and toilet preparations	250	S	5.78
3230	Manufacture of television and radio receivers, recording or reproducing apparatus etc	250	S	5.69
2922	Manufacture of lifting and handling equipment	250	S	5.65
7512	Regulation of the activities of agencies that provide health, education, and social care	250	S	1.31
4100	Collection, purification and distribution of water	200	S	4.53

Source: ABI 2004; Note. 1 Employment figures have been rounded to the nearest 50.

Note 2. Firm density; D = >31 units, M = 10-31 units and S = <10 units.

A noticeable feature of Table 7 is that the average LQ of the Havant “high points” is significantly higher than the AIF or Portsmouth average. This is because in a relatively small local economy such as Havant the presence of one or two large employers skews the data so that there appears to be a significant local specialisation. In almost all cases this high LQ figure corresponds with low density and employment figures.

Havant’s clusters of potential

Utilising the ICIC classifications of clusters it is possible to group the “high points” in Table 7 into potential clusters. Table 8 below shows the “high points” defined in Table 7 grouped into the amended ICIC defined clusters and the total number of jobs emanating from the “high point” sectors alone (where a potential cluster is comprised of a single “high point” it is excluded).

Table 8 Havant “high points” grouped into potential clusters			
<i>Cluster Description</i>	<i>Havant Area, High Points</i>	<i>Employment</i>	<i>No of Units</i>
Traded clusters			
Advanced Manufacturing	2524; 2912; 2922; 2923; 2960; 2971; 3002; 3162; 3230; 3430	4,250	50
Retail	5211; 5231; 5244; 5246; 5247	4,150	150
ICT	3002; 3230; 7260; 8030	2,750	125
Automotive	2524; 2852; 2912; 2922; 3162; 3430	2,450	75
Aerospace and Defence	2852; 2912; 2960; 3002; 3162	2,300	50
Pharmaceuticals	2442; 2452; 8032	2,300	-
Metal Manufacturing	2852; 2912; 2922; 2923; 3162; 3430	2,250	75
Power Generation	2912; 2922; 2923; 3002; 3162	2,100	25
Motor Driven Products	2912; 2923; 2960; 3002	1,800	25
Chemical Products	2442; 2452; 2524; 4013	1,800	-
Production Technology	2852; 2923	1,750	50
Heavy Construction Services	2912; 2923; 3162; 4531	1,700	75
Analytical Instruments	3002; 3162; 3230	1,450	25
Communications Equipment	3002; 3162; 3230	1,450	25
Medical Devices	2442; 3162	1,200	-
Building Fixtures, Equipment and Services	1740; 2524; 2923	1,200	25
Heavy Machinery	2852; 2912; 2922; 2923	1,100	50
Plastics	2542; 2971; 3230	1,100	25
Furniture	1740; 2524; 5244	1,050	50
Oil and Gas	2524; 2912	800	-
Lighting and Electrical Equipment	2524; 3230	750	25
Business Services	7032; 7260	750	125
Leisure and Tourism	5523; 9261	700	25
Local clusters			
<i>Local health services</i>	5231; 8514; 8531	2,650	125
<i>Local housing and household goods and services</i>	2971; 5244; 5246; 7032	1,300	75
<i>Local utilities</i>	4013; 4100	600	-

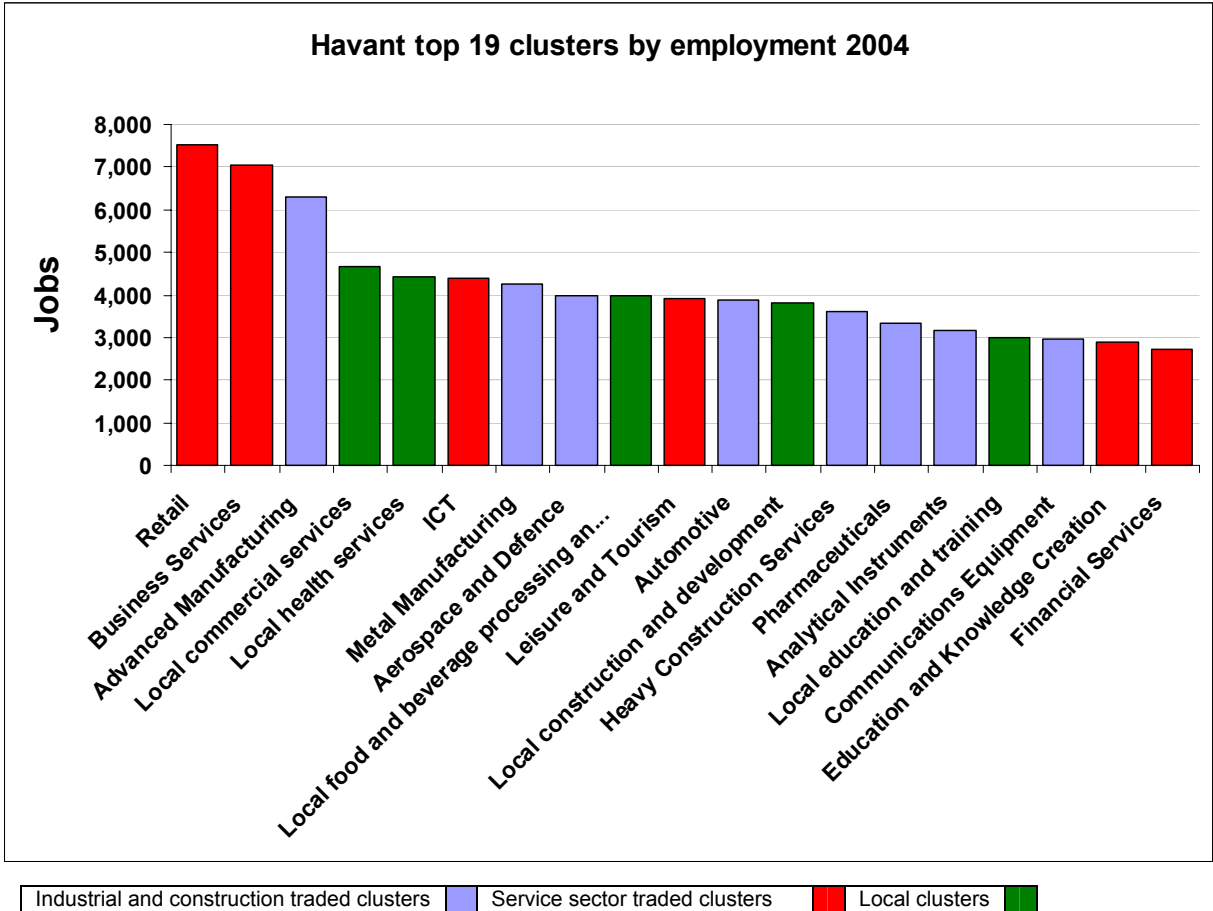
Note 1. Employment rounded to nearest 50, units to nearest 25; Note 2. - = <13 units.

It is evident that some high point SIC’s crop up in a number of different clusters, for instance general mechanical engineering (2852) is a part of the Heavy machinery, Production technology, Metal manufacturing, Aerospace and defence and Automotive clusters because it provides intermediate inputs to the various manufacturing sectors. As can be seen from Table 8 some of the potential clusters appear to have a critical mass from just the “high points” alone, whilst others are spread

relatively thinly. Of the latter the most obvious examples are the Pharmaceuticals, Chemical products, Medical devises and Oil and gas clusters which all rely on less than 13 units for their employment. In order to identify the “strength in depth” of potential clusters it is necessary to review how clusters in their entirety perform in terms of employment, concentration and more importantly employment growth over the last five years. It is to this part of the analysis that we now turn.

The main Havant clusters by size

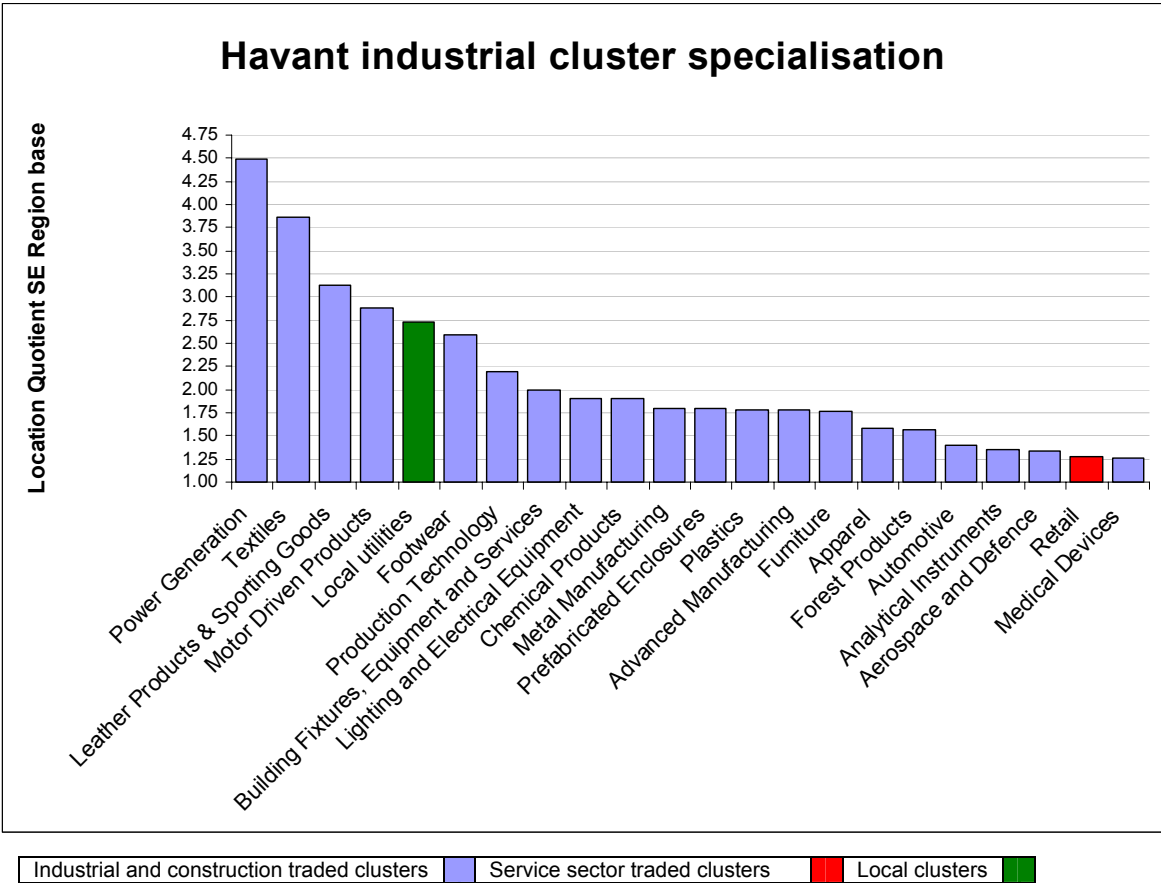
Whilst it must be remembered that individual SIC sectors may appear in one or more clusters, there are across the Havant area 19 clusters that might be regarded as highly significant in employment terms. Each of these clusters accounted for more than 2,500 jobs in 2004. As can be seen from the graph below, 14 of the 19 are traded clusters and the other 5 are local clusters. Seven of the traded clusters are mainly manufacturing based (Advanced manufacturing, Metal manufacturing, Aerospace and defence, Automotive, Pharmaceuticals, Analytical instruments and Communications equipment). The other six are mainly service-based clusters such as Retail, Business services, ICT, Leisure and tourism. In addition there is one construction section (Heavy construction services), which employs around 3,500 people. The most significant of the traded clusters Retail, Business services, and Advanced manufacturing each employ more than 6,000 people.



The largest local clusters are Local commercial and Local health services both employing in excess of 4,000 people. The former includes both professional services such as architecture, software consultancy, accountancy and legal services as well as manual services such as contract staff and industrial cleaning. The latter includes hospitals, pharmacies, medical and dental practices, health centres and social work activities including provision of residential care. However, it should be noted that some sectors are likely to appear in both local and traded clusters because it is not possible to differentiate the amount of activity that relies purely on local demand, this is particularly true with some Business and Local commercial services.

Significant Havant clusters by concentration

Utilising the employment LQ measure that was previously used to identify individual sector high points, it is possible to rank the most important employment clusters in Havant by their concentration. As with individual sectors those with an LQ greater than 1.249 are identified as being significant and can be expected to export their goods or services beyond the local economy. Again the baseline used is the average employment for each cluster within the Southeast Region.



The fact that a cluster has a high LQ doesn't necessarily mean that it generates a large amount of employment and equally a cluster with a lower LQ may well generate significant employment. For instance, Textiles has an LQ of almost 4 (4 times the Southeast average) but generates less than 400 jobs whereas Business services produces over 7,000 jobs but has an LQ of 0.58 (42% below the

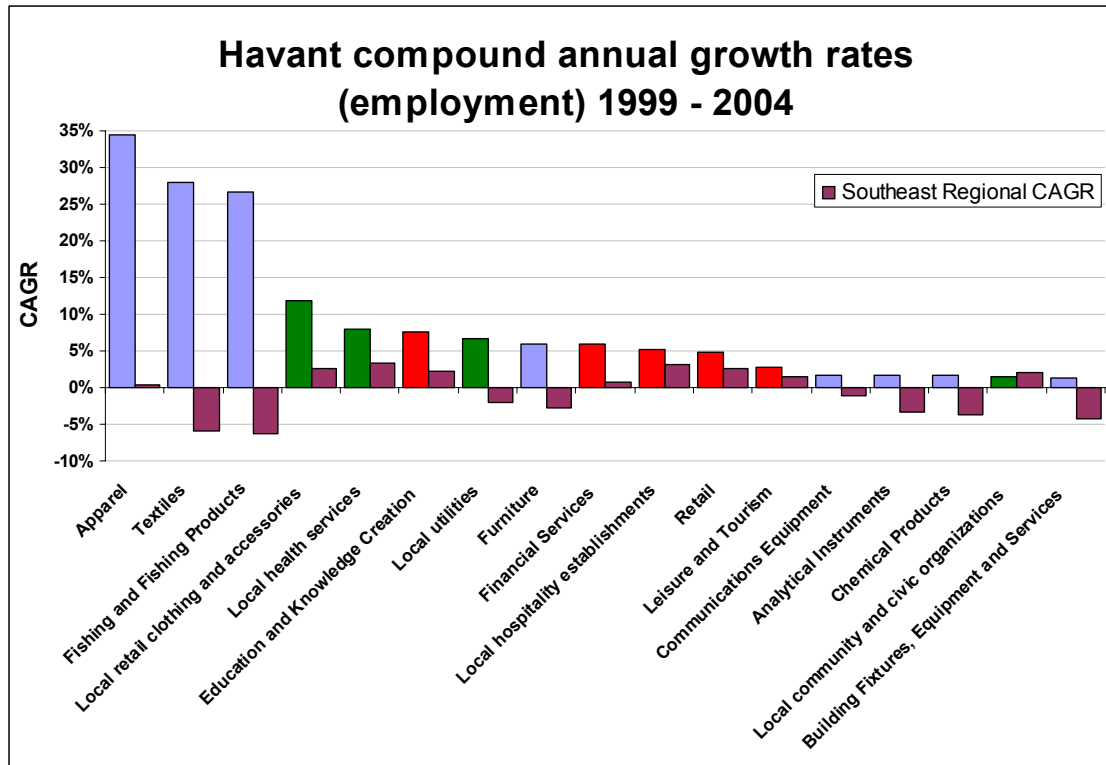
regional average). The most noticeable feature of the graph is that there are many more clusters above the threshold than in either the AIF area or Portsmouth and they also tend to exhibit quite high LQ's. In contrast to employment, only one of the 22 clusters featured is a local cluster. As with the AIF area almost all are manufacturing based. The other notable point is that Retail appears as a significant concentration, this is highly unusual because although the cluster is always amongst the highest in employment terms, retail activity tends to be fairly evenly spread outside major sub-regional shopping centres.

Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Analytical instruments, Automotive, Retail and Metal manufacturing. There are however, a number of clusters that fall below the 1.249 threshold, but nevertheless generate significant employment. Amongst this category are Communications equipment, ICT, Heavy construction and Local health services. The crucial question is whether or not the significant sectors are growing or shrinking in terms of employment and it is to that question that we now turn.

Havant's compound annual growth rates of employment

The optimal strategy in economic development is to invest time and effort in those clusters, which have the most potential to grow. The next part of the analysis examines employment growth rates comparing the compound annual growth rate (CAGR) locally with that regionally. The graph on the next page shows that 17 of the 54 traded and local clusters have CAGR's of more than 1% per annum, around the same number as the AIF area in general.

In eight clusters the local rate of growth contrasts with decline regionally (e.g. Textiles, Fishing and fishing products, and Local utilities). In seven other clusters local growth is significantly ahead of that in the region generally, this is most notable in Local retail clothing and accessories, local health services, Education and knowledge creation and Financial services. Interestingly, Local community and civic organisations shows positive growth but lags behind the regional growth rate. Only two of the six clusters that have high levels of employment and concentration are featured in the graph (Analytical instruments and Retail). In the case of the former, the cluster is growing locally whilst declining regionally suggesting that it is becoming even more specialised. In the latter it is growing faster than the regional trend. Generally speaking the graph suggests that growth in Havant is not simply confined to service sector based clusters. This is different to the national picture where manufacturing is facing a squeeze as activities are moved offshore, but in general services are expanding. This may indicate that what manufacturing capacity remains UK-based is consolidating in locations such as Havant that have good logistical connections, or alternatively that the effect is lagged and has yet to impact fully on Havant.



Industrial and construction traded clusters Service sector traded clusters Local clusters Green

Drawing together the various strands it is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light system as follows:

Green employment (2,500+), concentrated (LQ 1.25+) and CAGR 1% above regional average

Amber employment (2,500+), concentration 0.85 – 1.24 and CAGR 1% above regional average

Red employment (2,500+), concentrated but CAGR 1% below regional average

Note: that clusters with a negative growth rate that is less than the regional decline are not included.

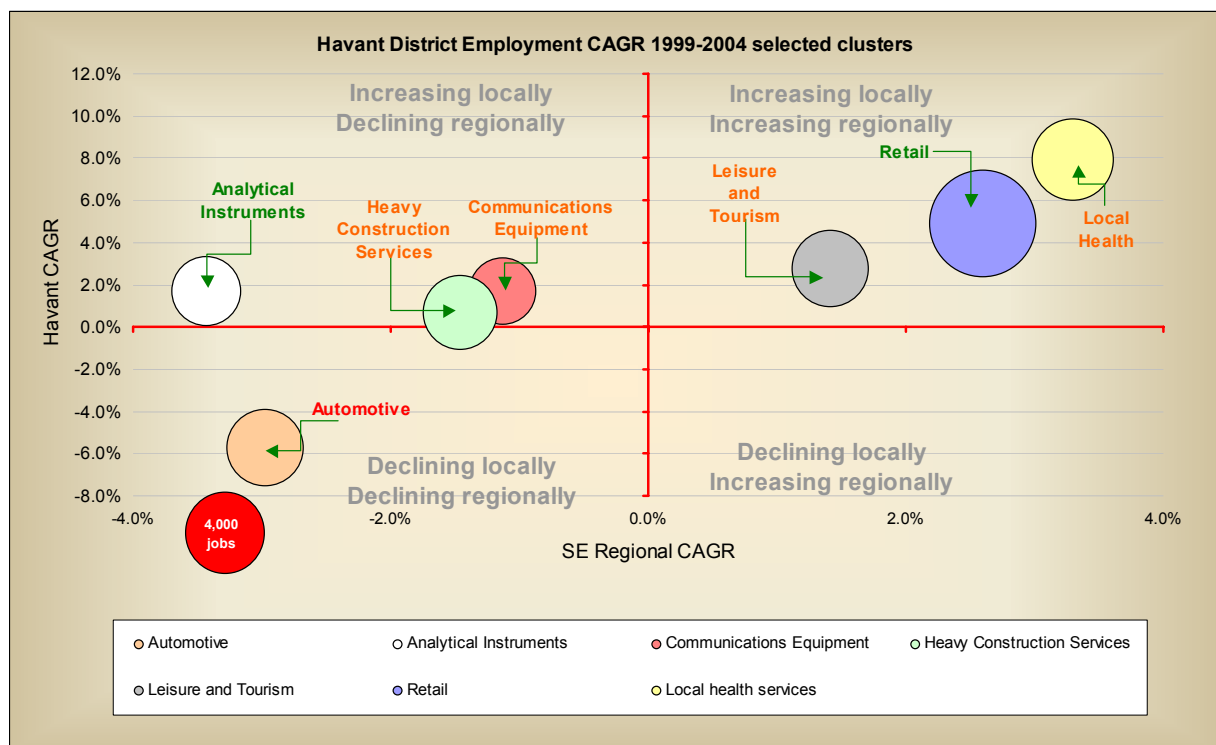
Havant winners, losers and those that may fly

The bubble chart on the following page identifies those clusters classified as green, amber or red and should be studied alongside the cluster summary table (Table 9).

As can be seen there are two clusters in the green category identified on the bubble chart (Analytical Instruments and Retail) and four clusters fall into the amber category (Communications equipment, Heavy construction services, Leisure and Tourism and Local health services). There is also one cluster, Automotive, in the red category.

The Automotive cluster has declined both regionally and nationally over the last five years. In Havant that decline has been faster than both the regional and national trend with, on average, almost 6% of employment being lost each year. Whilst there have been reductions in almost every SIC in the Automotive cluster, the main drivers of decline in Havant have been Manufacture of fabricated metal products, Manufacture of pumps and compressors, Manufacture of parts and accessories for motor

vehicles and Renting of automobiles. In combination these four SIC's account for 57% of the 1,300 jobs lost throughout the cluster.



At the other end of the scale Analytical instruments and Retail combined have gained over 1,850 jobs (86% of these are in Retail). Both have grown ahead of the national trend. In the case of Analytical instruments this is against a net reduction regionally, whereas in Retail the growth rate is almost twice the regional average. The driver for Analytical instruments is clearly Computing and Aerospace activities, whereas in mainstream manufacturing there have been net losses. In Retail the increase has been across almost all SIC's with particular emphasis on Clothing, DIY, Specialised shops and super/hypermarkets.

The clusters in the amber category are interesting, these have the potential to become specialised and in each case have grown faster than the regional average over the last five years. In the two industrial-based clusters, Communications equipment and Heavy construction services, the growth has been against a reduction regionally. In the two service-based clusters, Leisure and tourism and Local health services, employment growth has been faster than the regional trend. All four are some way off becoming specialised locally and in the case of Leisure and tourism there may well be an element of catch-up going on. However, what is important is that all the clusters in the amber category have a substantial number of firms, even local health services is comprised of more than 200 individual units.

The origins of their current growth are also informative. In the case of Communications equipment it is the high-tech ICT based SIC's that provide the push factor. In Heavy construction growth is driven by the Manufacture of plant for construction projects and Electrical installation whilst it is held back by

poor performance in Pumps and compressors (also a negative influence on Automotive) and large civil engineering project work. The Local health services cluster is being driven by Other human health activities, this category covers a wide range of health activities outside hospitals and general medical practices such as Community nursing and midwifery, Physiotherapy, Occupational therapy and Activities within residential health facilities including homes for the aged – locally four of these employ over 200 staff. The main impetus for growth in Leisure and tourism is short-stay tourism accommodation including Holiday centres and villages, Restaurants, Bars and Sports arenas and stadium, this covers all types of outdoor sports, including golf. However, this growth is somewhat tempered by a reduction in Other recreational activities, which includes those associated with traditional beach holidays.

There are six other important clusters in Havant that fall outside the traffic light categories for one reason or another. In the case of Advanced manufacturing and Aerospace and defence, both are still significant in employment terms and concentrated but they are losing employment, although not as rapidly as the regional average. The areas of concern in these manufacturing clusters include Pumps and compressors, Ammunition and weapons, Electronic components and Domestic appliances.

The ICT, Medical devices and Pharmaceuticals clusters are all present in Havant, although only Medical devices can be considered concentrated. In each case there has been no employment growth over the last five years, despite positive growth in ICT and Pharmaceuticals regionally. Medical devices saw negative growth regionally. In ICT gains in Software consultancy and supply and Higher education are cancelled out by losses in Manufacturing of ICT equipment and Data processing and other computer related activities (excluding database management). In Pharmaceuticals small gains in some SIC's are cancelled out by small losses in others.

Finally, Business services although providing around 7,000 jobs and supporting over 1,100 businesses is more than 40% below the regional average concentration level, moreover it is continuing to lose jobs against a small regional year-on-year increase. It may be that proximity to Portsmouth has led to a significant underperformance in this cluster or, alternatively, there could be important local factors.

Overall, the performance of clusters in Havant has been mixed. Whilst there are losses in manufacturing these generally are less severe than the regional average. Although the Business services cluster has under performed, there has been strong employment growth in Leisure and tourism, Health and Retail. The growth in retail is particularly strong and surprising for a non-metropolitan district. The most likely explanation is that this represents overspill from the very crowded environs of Portsmouth, where expansion possibilities are limited. Access is also relatively easy given the proximity of the major employment areas to the motorway and trunk road network.

Table 9 - Havant clusters summary

Cluster Number	Cluster Description	Employment 2004	Units 2004	LQ, SE Region base	Havant CAGR	SE Region CAGR
Traded clusters						
2	Aerospace and Defence	3,400	275	1.334	-1%	-3.8%
3	Analytical Instruments	3,200	225	1.354	2%	-3.4%
4	Apparel	900	50	1.575	34%	0.4%
5	Automotive	3,900	350	1.394	-6%	-3.0%
6	Building Fixtures, Equipment and Services	1750	125	1.997	1%	-4.2%
7	Business Services	7,050	1,100	0.578	-1%	0.4%
8	Chemical Products	2,300	125	1.896	2%	-3.7%
9	Communications Equipment	3,000	225	1.135	2%	-1.1%
10	Processed Food	450	125	0.277	-4%	-0.8%
11	Agricultural Products	150	25	0.245	-11%	-2.3%
12	Distribution Services	1,700	300	0.498	0%	-2.2%
13	Education and Knowledge Creation	2,900	400	0.706	8%	2.3%
14	Advanced Manufacturing	6,300	275	1.776	-4%	-4.7%
15	Heavy Machinery	1,850	200	1.249	-4%	-3.1%
16	Financial Services	2,700	725	0.574	6%	0.7%
17	Fishing and Fishing Products	-	-	0.583	27%	-6.3%
18	Footwear	650	25	2.590	-2%	-3.7%
19	Forest Products	350	-	1.561	-1%	-3.5%
20	Furniture	1,250	75	1.767	6%	-2.7%
21	Heavy Construction Services	3,600	575	1.178	1%	-1.5%
22	Leisure and Tourism	3,900	375	0.862	3%	1.4%
23	ICT	4,400	350	1.084	0%	0.6%
25	Jewellery and Precious Metals	100	25	1.146	-4%	-5.9%
26	Leather Products & Sporting Goods	500	25	3.133	-2%	-7.2%
27	Lighting and Electrical Equipment	950	50	1.899	-2%	-7.3%
30	Construction Materials	350	100	0.441	-1%	-2.1%
32	Medical Devices	2,400	175	1.255	0%	-0.4%
33	Metal Manufacturing	4,270	400	1.798	-4%	-4.0%
34	Motor Driven Products	1,950	25	2.879	-4%	-4.3%
36	Oil and Gas	2,100	300	0.902	-3%	-3.4%
39	Pharmaceuticals	3,350	75	0.813	0%	1.0%
40	Plastics	1,750	150	1.778	-7%	-2.3%
41	Power Generation	2,300	25	4.485	1%	-6.8%
43	Prefabricated Enclosures	450	25	1.795	-8%	-7.3%
44	Production Technology	2,400	100	2.193	-3%	-4.8%
45	Publishing and Printing	350	100	0.308	-6%	-1.0%
47	Textiles	350	25	3.859	28%	-5.9%
49	Transportation and Logistics	600	200	0.335	-4%	-3.5%
50	Marine	800	175	0.449	-2%	-2.4%
51	Retail	7,500	600	1.278	5%	2.6%
Local clusters						
L1	Local food and beverage processing and distribution	4,000	225	1.213	0%	0.9%
L2	Local personal services (non-medical)	350	75	0.979	-1%	-0.3%
L3	Local health services	4,400	200	1.002	8%	3.3%
L4	Local utilities	850	25	2.722	7%	-1.9%
L5	Local logistical services	850	100	0.578	-3%	-0.8%
L6	Local housing and household goods and services	2,500	325	1.154	-1%	2.4%
L9	Local personal transportation	550	125	0.581	-5%	-2.1%
L10	Local retail clothing and accessories	1,350	175	1.036	12%	2.6%
L11	Local entertainment and media	550	100	0.805	-6%	3.5%
L12	Local hospitality establishments	2,150	200	0.928	5%	3.1%
L13	Local commercial services	4,650	1,025	0.659	0%	0.5%
L14	Local education and training	3,000	75	1.036	0%	2.2%
L15	Local community and civic organizations	1,550	75	0.617	1%	2.0%
L16	Local construction and development	3,800	825	0.952	-1%	-0.4%

Note: Traffic light coding: **Green** - significant, and growing faster than the regional average; **Amber** - significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average.

Section 4. Fareham

Summary - The area

Fareham covers an area of 74sq km and has a population of approximately 111,000 people. The District's labour supply is 65,000 people of whom 53,000 are either employed or self-employed. There are an estimated 52,000 jobs in the town and the stock of businesses both registered and unregistered may be as high as 7,800. The latest ABI data (2004) estimates that there are 44,300 employees working in 4,300 units. Much of the employment is concentrated in wards with direct access to the M27 motorway.

The Fareham area high points and clusters of potential




In total, 23 SIC's out of 514 separate categories of economic activity fulfil both the concentration and employment criteria (> 200 employees and LQ of 1.249+). Some of the larger categories rely on a small number of large companies. Grouping the high points together suggests a number of clusters of potential these include Business Services, Metal manufacturing, Advanced manufacturing, and Local construction and development.

Size, concentration and employment growth

Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Automotive, Metal manufacturing, Processed food, Transport and logistics and Heavy construction service. There are however, a number of clusters that fall below the 1.249 threshold, but generate significant employment. Amongst this category are Local construction, Local education and training and Analytical instruments.

Winners, losers and those that may fly

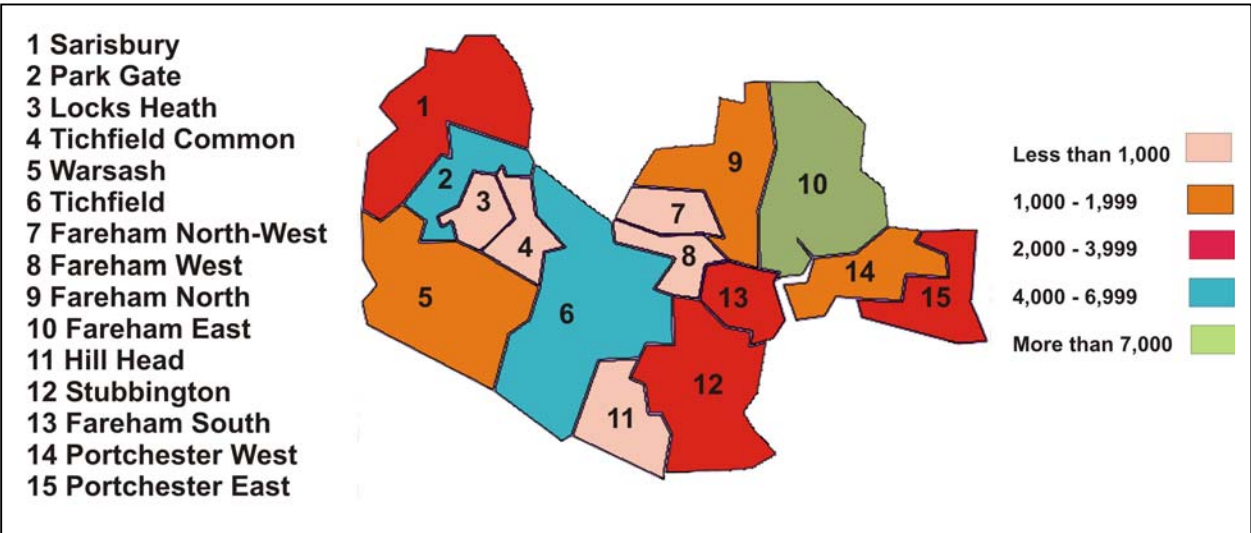
It is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light coding system. The three levels are: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average. All clusters account for more than 2,500 jobs. The main results for the Fareham area are:

Green 	Doing well	Aerospace and defence, Processed Food, Transportation and logistics
Amber 	With potential	Business services, Distribution services, Local food and beverage processing and distribution, Local commercial services, Local education and training, Local community and civic organisations, Local construction and development
Red 	Causing concern	None identified

The Fareham area profile

Fareham is the second smallest of the four districts in population terms but the largest in area. It covers an area of 74sq km (more than Portsmouth and Gosport combined) and has a population of 111,000. To the south and east it borders the urbanised districts of Gosport and Portsmouth and to the north and west the more rural districts of Winchester and Eastleigh.

As far as economic activity is concerned the APS estimates that the local supply of labour is almost 65,000 working age residents, of these 55,000 (85%) are economically active and 97% of these (53,000) are either employed or self-employed. On the demand side, there are an estimated 52,000 jobs in Fareham, which is around 21% of all jobs in the AIF area. The Fareham area currently has enough jobs to satisfy local demand, and in theory there is no need to commute out of the Borough to find work. However, significant numbers do commute to both Portsmouth and Southampton. The DTI's SBS estimates that there were almost 3,300 VAT registered enterprises in Fareham at the beginning of 2005. Given the fact that a large percentage of self-employed and micro businesses are not registered for VAT the true figure for the stock of local businesses could be as high as 7,800. The latest ABI data (2004) estimates that employment levels in Fareham are in the region of 44,300 people in almost 4,300 units (usually individual firms). The number of jobs has increased by over 4,200 (10%) in the last 5 years and the number of units by 11%.



As can be seen from the map above employment is concentrated into specific areas of the Town. East Fareham accounts for around 11,000 jobs and includes the town centre, which is also adjacent to the M27 motorway. The two other wards with direct access to the motorway, Titchfield and Park Gate account for 6,900 and 4,800 jobs respectively. The majority of industrial activity is concentrated in East and South Fareham, Park Gate, Portchester East and Titchfield. The wards that are predominantly residential are Locks Heath, Titchfield Common, Hill Head, West and North-West Fareham.

Fareham area's "high points"

Within the Fareham area 306 individual SIC's recorded some level of employment in 2004. These ranged in size from almost 2,500 people to just one. Out of these 55 individual SIC's fulfilled the employment criteria (more than 200 people) and 90 fulfilled the concentration criteria (LQ of >1.249). In total 23 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Fareham long list of clusters. Table 10 below sets out the "high points" ranked by density (number of firms). Eight of these "high points" are classified as being "deep". These include one manufacturing sector (General mechanical engineering), three in construction (General construction of buildings, Special trades and Other building completion) and four in services. Unlike Havant, the SIC's classified as medium and shallow are a mix of both service and manufacturing sectors. Amongst the larger organisations present in the shallow category are the local authority, the National Air Traffic Service (NATS) at Swanwick and the MOD's HMS Collingwood.

A noticeable feature of Table 10 is that the Fareham "high points" are a fairly eclectic mix. They include high-tech engineering in the form of aerospace, a significant number of construction related activities, as well as both professional and manual business services. The average LQ figure is lower than in the case of Havant but still significantly higher than that of Portsmouth.

Table 10 – Fareham "high points"

SIC Class 02	Class Description	Employment	Density	LQ, SE Region base
7470	Industrial cleaning	2,450	D	2.96
4521	General construction of buildings and civil engineering works	1,200	D	1.60
8042	Adult and other education not elsewhere classified	700	D	2.07
7411	Legal activities	450	D	1.47
2852	General mechanical engineering	300	D	2.28
4545	Other building completion	250	D	3.06
9302	Hairdressing and other beauty treatment	250	D	1.28
4525	Other construction work involving special trades	200	D	1.81
3530	Manufacture of aircraft and spacecraft	1,000	M	9.03
6512	Other monetary intermediation	950	M	1.52
2923	Manufacture of non-domestic cooling and ventilation equipment	650	M	11.12
5153	Wholesale of wood, construction materials and sanitary equipment	250	M	1.54
6412	Courier activities other than national post activities	200	M	1.76
7511	General (overall) public service activities	1,450	S	2.09
6323	Other supporting air transport activities	1,150	S	11.61
5139	Non-specialised wholesale of food, beverages and tobacco	800	S	6.32
3430	Manufacture of parts and accessories for motor vehicles and their engines	750	S	8.65
2924	Manufacture of other general purpose machinery not elsewhere classified	400	S	6.54
7522	Defence activities	350	S	1.43
6021	Other scheduled passenger land transport	300	S	2.25
4532	Insulation work activities	250	S	15.15
6603	Non-life insurance	250	S	1.40
1581	Manufacture of bread; manufacture of fresh pastry goods and cakes	200	S	3.67

Source: ABI 2004; Note. 1 Employment figures have been rounded to the nearest 50.

Note 2. Firm density; D = >31 units, M = 10-31 units and S = <10 units.

Fareham's clusters of potential

Utilising the ICIC classifications of clusters it is possible to group the "high points" in Table 10 into potential clusters. Table 11 below shows the "high points" defined in Table 10 grouped into the amended ICIC defined clusters and the total number of jobs emanating from the "high point" sectors alone (where a potential cluster is comprised of a single "high point" it is excluded).

Table 11 Fareham "high points" grouped into potential clusters			
<i>Cluster Description</i>	<i>Fareham Area, High Points</i>	<i>Employment</i>	<i>No of Units</i>
Traded clusters			
Business Services	6412; 6512; 6603; 7411; 7470; 8042	5,050	200
Metal Manufacturing	2852; 2923; 3430; 3530; 4521	3,850	250
Processed Food	5139; 7470	3,250	75
Advanced Manufacturing	2923; 2924; 3430; 3530; 7522	3,100	25
Aerospace and Defence	2852; 3530; 6323; 7522	2,800	50
Heavy Construction Services	2852; 2923; 4521; 5153	2,400	250
Automotive	2853; 2924; 3430; 8042	2,200	75
Motor Driven Products	2923; 2924; 3530	2,050	25
Financial Services	6412; 6512; 6603; 7411	1,850	75
Transportation and Logistics	6021; 6323	1,450	-
Building Fixtures, Equipment and Services	2852; 2923; 2924	1,350	50
Heavy Machinery	2852; 2923; 2924	1,350	50
Production Technology	2852; 2923; 2924	1,350	50
Distribution Services	5139; 5135; 6412	1,250	50
Oil and Gas	4525; 7411	650	75
Local clusters			
Local commercial services	6412; 7411; 7470	3,100	125
Local construction and development	4521; 4525; 4523; 4545; 5133	2,100	300

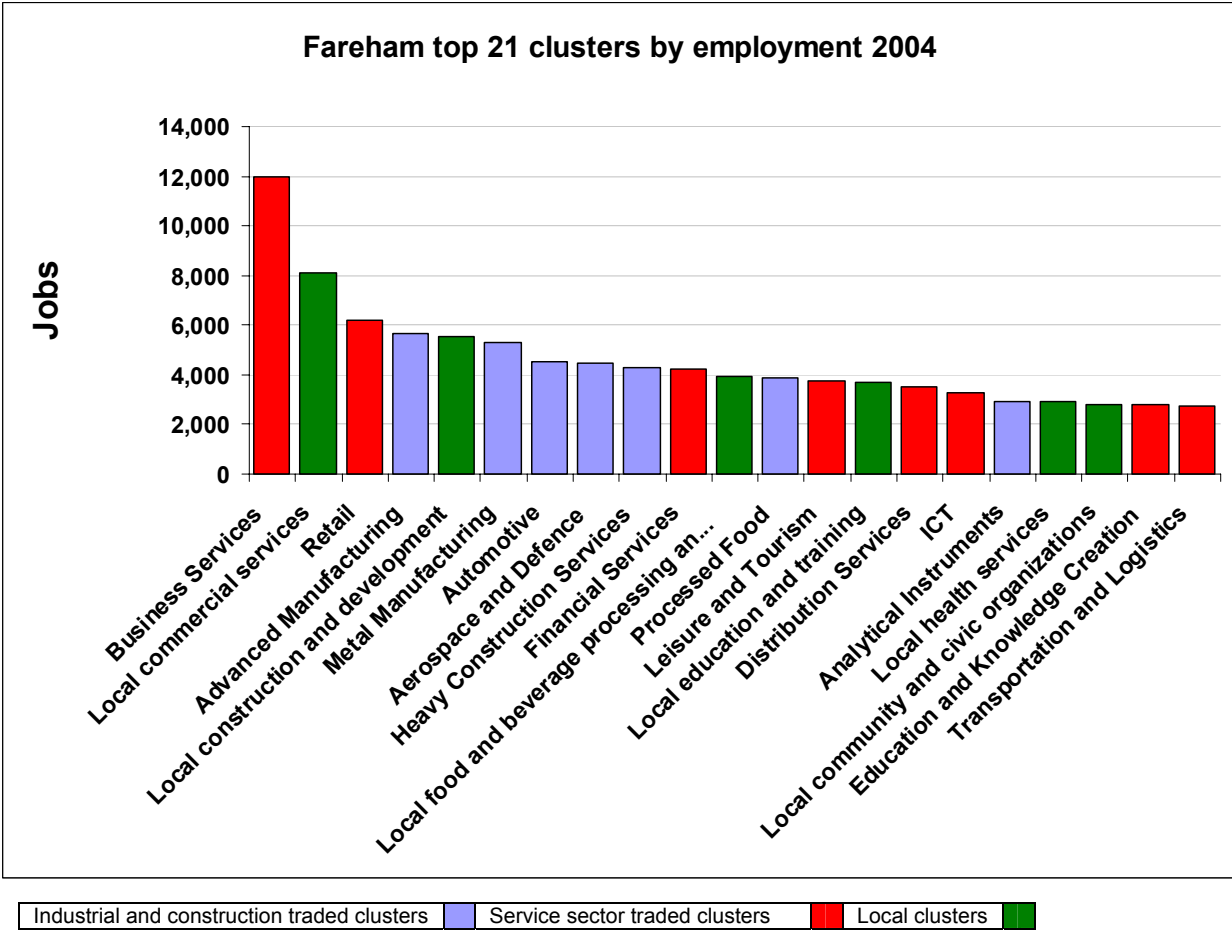
Note 1. Employment rounded to nearest 50, units to nearest 25; Note 2. - = <13 units.

It is evident that some high point SIC's crop up in a number of different clusters, for instance general mechanical engineering (2852) is a part of the Heavy machinery, Production technology, Metal manufacturing, Aerospace and defence and Automotive clusters because it provides intermediate inputs to these various manufacturing clusters. As can be seen from Table 11, some of the potential clusters appear to have a critical mass from just the "high points" alone, whilst others are spread relatively thinly. Of the latter the most obvious example is Transport and logistics, which relies on less than 13 units for all its high point employment. The clusters that show the most promise at this stage are Business services, Metal manufacturing and Local and Heavy construction (in the latter two there is considerable overlap). In order to identify the "strength in depth" of potential clusters it is necessary to review how clusters in their entirety perform in terms of employment, concentration and more importantly employment growth over the last five years. It is to this part of the analysis that we now turn.

The main Fareham clusters by size

Whilst it must be remembered that individual SIC sectors may appear in one or more clusters there are across the Fareham area 21 clusters that might be regarded as highly significant in employment terms. Each of these clusters accounted for more than 2,500 jobs in 2004. As can be seen from the

graph below, 15 of the 21 are traded clusters and the other 6 are local clusters. Six of the traded clusters (coloured blue) are mainly manufacturing based (Advanced manufacturing, Metal manufacturing, Automotive, Aerospace and defence, Processed foods and Analytical instruments). The other eight (coloured red) are mainly service-based clusters such as Business services, Retail, Financial services, Leisure and tourism, ICT etc. In addition, there is one construction section (Heavy construction services), which employs around 4,300 people. The most significant of the traded clusters, Business services, employs nearly 12,000 people, Retail 6,200 and Advanced manufacturing nearly 5,700 people.

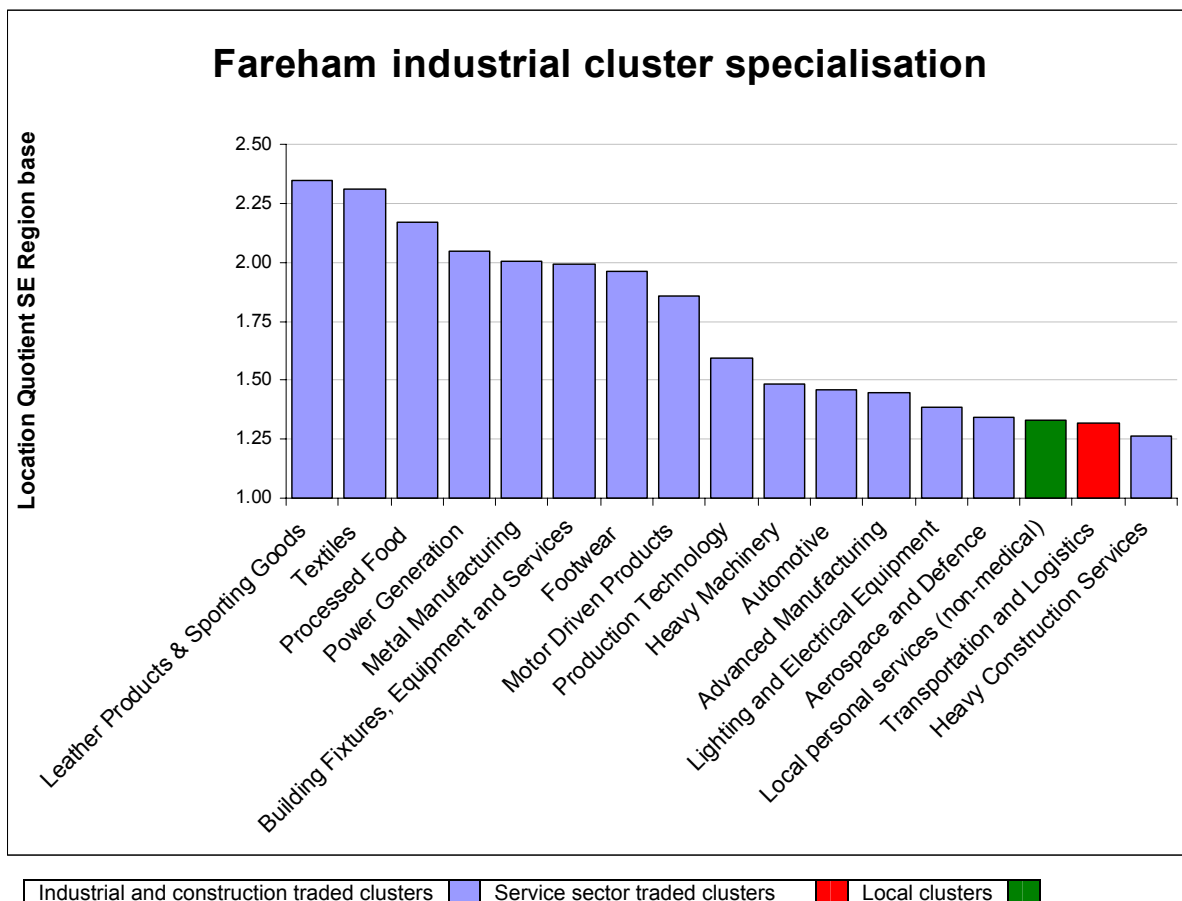


The largest local clusters are Local commercial services and Local construction and development both employing in excess of 5,500 people. The former includes both professional services such as architecture, software consultancy, accountancy and legal services as well as manual services such as contract staff and industrial cleaning. The latter includes most of the construction trades from General construction of buildings to plastering and joinery. However, it should be noted that some sectors are likely to appear in both local and traded clusters because it is not possible to differentiate the amount of activity that relies purely on local demand, this is particularly true with some Business and Local commercial services where there is considerable overlap.

Significant Fareham clusters by concentration

Utilising the employment LQ measure that was previously used to identify individual sector high points, it is possible to rank the most important employment clusters in Fareham by their concentration. As with individual sectors those with an LQ greater than 1.249 are identified as being significant and can be expected to export their goods or services beyond the local economy. Again the baseline used is the average employment for each cluster within the Southeast Region.

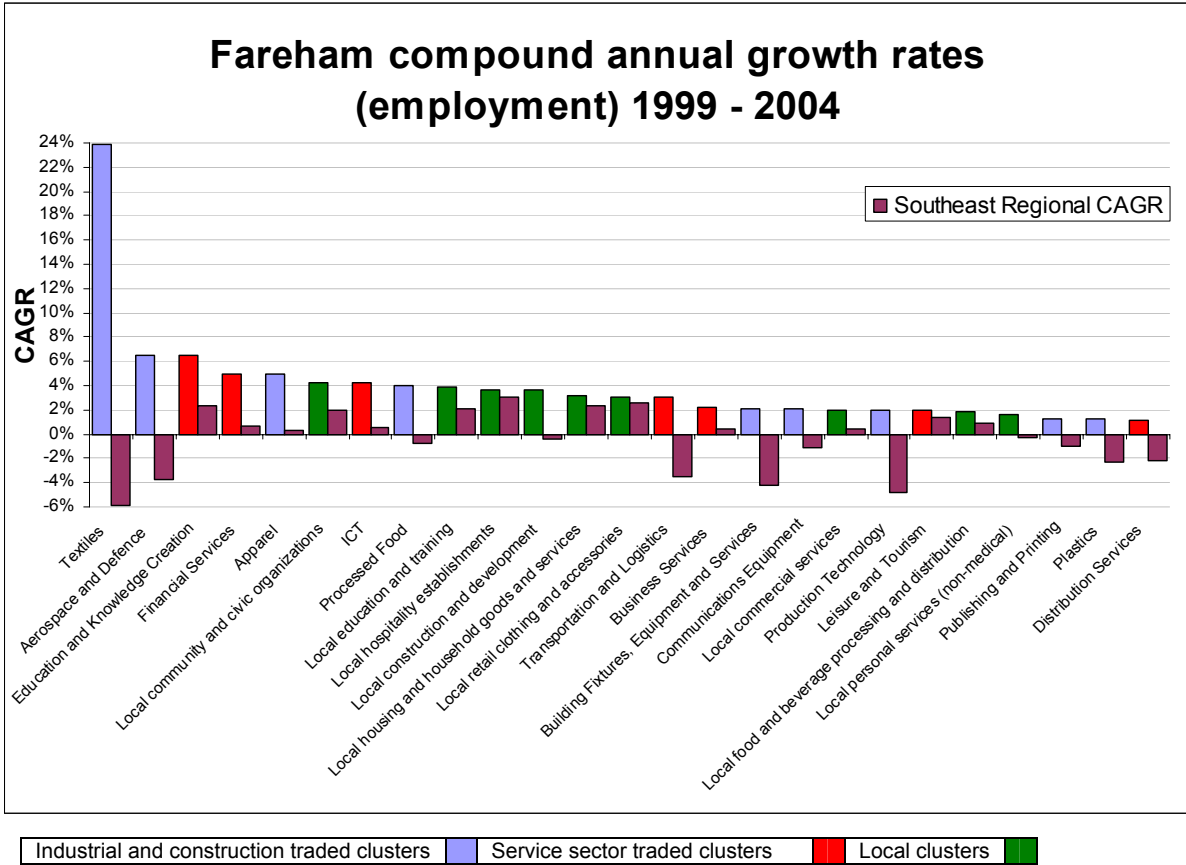
The fact that a cluster has a high LQ doesn't necessarily mean that it generates a large amount of employment and equally a cluster with a lower LQ may well generate significant employment. For instance, Leather Products & Sporting Goods has an LQ of almost 2.35 (more than twice the regional average) but generates less than 500 jobs whereas Business services produces almost 12,000 jobs in over 1,300 units but has an LQ of 0.89 (11% below the regional average). The most noticeable feature of the graph on the following page is that there are 17 clusters above the baseline whereas in Portsmouth there are only 11. The clusters also tend to exhibit quite high LQ's. In contrast to employment, only one of the 17 clusters featured is a local cluster. As with the AIF area almost all are manufacturing based. The other notable point is that Transport and logistics appears as a significant concentration, this is highly unusual particularly in a relatively built up area. The likelihood is that companies are taking advantage of Fareham's good access to the motorway network to set up a base within the Borough rather than in the main cities of Portsmouth and Southampton.



Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Automotive, Metal manufacturing, Processed food, Transport and logistics and Heavy construction services. There are however, a number of clusters that fall below the 1.249 threshold, but still generate significant employment. Within this category are Local construction, Local education and training and Analytical instruments. The crucial question is whether or not the significant sectors are growing or shrinking in terms of employment and it is to that question that we now turn.

Fareham’s compound annual growth rates of employment

If clusters are to drive forward the local economy then the optimal strategy is to invest time and effort in those, which have the most potential to grow. The next part of the analysis examines employment growth rates comparing the compound annual growth rate (CAGR) locally with that regionally. The graph below shows that 25 of the 54 traded and local clusters have CAGR’s of more than 1% per annum, this is around the same proportion as in Portsmouth.



In twelve clusters the local rate of growth contrasts with decline regionally (e.g. Textiles, Aerospace and defence, and Transportation and logistics). In the other thirteen clusters local growth is significantly ahead of that in the region generally, this is most notable in Education and knowledge

creation, Financial services, Apparel and ICT. Three of the seven clusters that have high levels of employment and concentration are featured in the graph (Aerospace and defence, Processed food and Transportation and logistics). In all cases these are growing against a downward regional trend. Generally speaking the graph suggests that employment growth in Fareham is fairly evenly spread between industrial and service traded clusters and local clusters. This is a remarkably similar pattern to Portsmouth and the AIF area in general with more emphasis on local cluster growth rather than the traded cluster growth, which is a feature of Havant and Gosport.

Drawing together the various strands it is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light system as follows:

Green employment (2,500+), concentrated (LQ 1.25+) and CAGR 1% above regional average

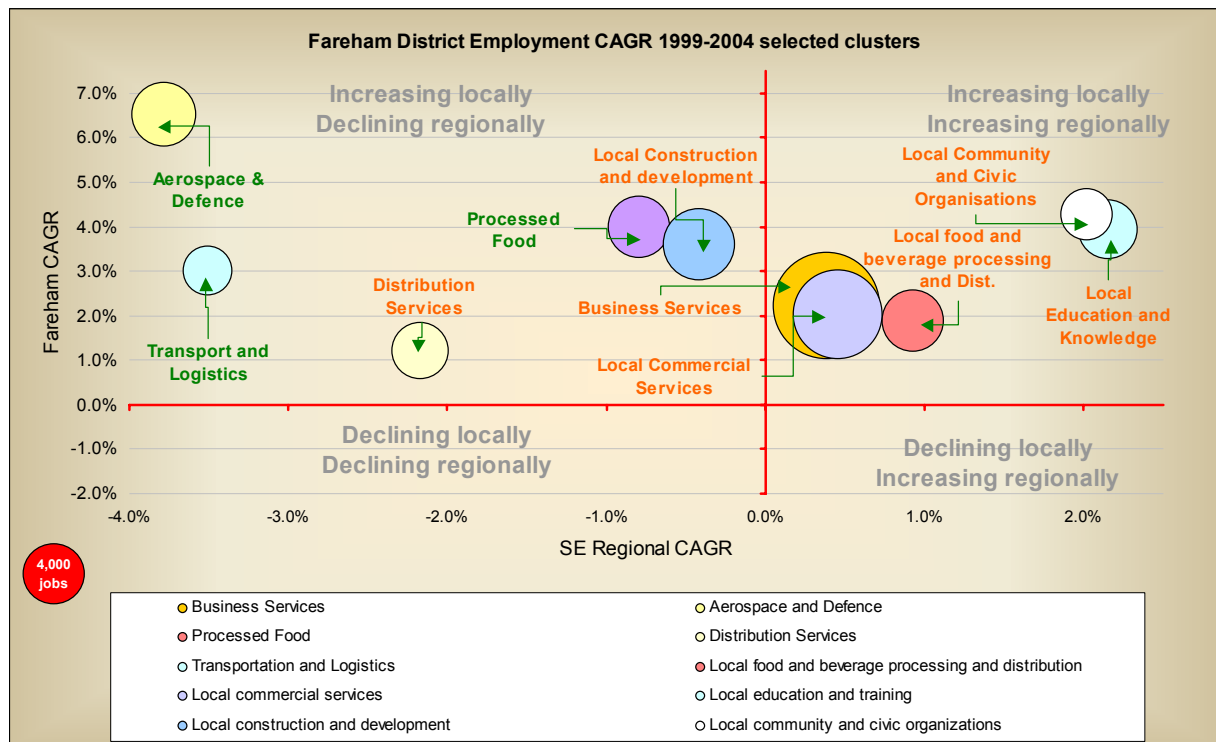
Amber employment (2,500+), concentration 0.85 – 1.24 and CAGR 1% above regional average

Red employment (2,500+), concentrated but CAGR 1% below regional average

Note: that clusters with a negative growth rate that is less than the regional decline are not included.

Fareham winners, losers and those that may fly

The bubble chart below identifies those clusters classified as green, amber or red and should be studied alongside the cluster summary table following the next page.



As can be seen there are three clusters in the green category identified on the bubble chart (Aerospace and defence, Processed food and Transport and logistics) and seven clusters fall into the amber category (Business services, Distribution services, Local construction and development, Local

commercial services, Local food and beverage processing and distribution, Local community and civic organisations and Local education and knowledge) There are no clusters in the red category.

The three clusters in the green category are clearly growing locally whilst declining regionally. All three are traded clusters and combined have been responsible for an increase of just under 2,300 jobs over the last 5 years. On closer inspection it is apparent that the bulk of the jobs in Aerospace and defence are from two sources, Defence and Other supporting air transport activities (primarily NATS). In the case of Processed food the gains are from non-specialised wholesale of food and beverage, Industrial cleaning and Bread pastry and cakes, most of it from the non-productive elements. Finally in Transport logistics the gains are centred on Other supporting air transport activities which have offset the losses from more traditional sectors such as road transport and storage and warehousing. Taken in combination, the reasons for the employment gains in these three traded sectors are nothing to do with production, but instead the movement of a national facility (NATS) into the district and logistical support activities connected with transport and food processing.

The clusters in the amber category are extremely interesting. First, because five of them are local clusters, and second because Business services is the largest employment cluster in the local economy accounting for over a quarter of all jobs in the district. Moreover, some of these clusters have the potential to become specialised in the coming years if current average growth rates continue.

Starting with Business services, although this cluster is not locally specialised (regionally it accounts for around 30% of all jobs) it is growing considerably faster than the regional trend (almost 2% per annum faster). Closer inspection of the raw data reveals that growth is fairly evenly spread across both professional and manual business service activities and these have compensated for losses in areas such as Architecture and Technical consultancy. Niche activities in the local economy include Legal, Banking and insurance and Industrial cleaning (although not all have shown high employment growth rates over the last five years). On the other hand, Distribution services cover some of the same activities as Transport and logistics and the quite modest gains, compared with the regional downturn, have been in Wholesale distribution, whilst Warehousing, Road transport and Sale of motor vehicles has declined significantly. The general impression is that this cluster, although in the amber category, is probably undergoing structural re-alignment and its growth is mostly a result of the relocation of companies to sites adjacent to the motorway.

Sectors in the five local clusters in the amber category have seen combined employment gains of over 2,900 jobs in the last five years. Around half of these are from the two largest clusters Local commercial services and Local construction and development. Local commercial services cover many of the sectors in the Business services cluster, although three SICs are the main engines of growth (Labour recruitment, Industrial cleaning and Other business services). The latter covers an eclectic range of activities from Design to Credit reporting and collecting to Brokerage and Consulting. The parallel between Local commercial and construction services is Labour recruitment, which appears in

both clusters. In the former it is a supplier, in the latter a demander. However, despite the crossover a large proportion of the job gains have been in General construction of buildings and Civil engineering, this is almost certainly tied in with the increased development activity, mainly in the western wards.

Much of the increase in employment in Local food and beverage processing and distribution comes from distribution activities. This is mainly due to a small number of larger wholesale companies operating from the Western wards adjacent to the M27. Finally, increases in Local education and training and Community and civic organisations are mainly from Adult education (possibly as a result of the changed designation of some secondary education), General public service activities and Social work. A proportion of these will be as a result of re-orientation of public sector activities to Fareham to take advantage of its' location as a transport hub in the sub-regional economy.

Two other important clusters in Fareham fall outside the traffic light categories for one reason or another. In the case of Advanced manufacturing, whilst it is significant in employment terms and concentrated it has been losing employment at around 1.5% per annum over the last five years. Although this is less severe than the regional decline, the loss amounts to around 450 jobs mainly in Instrumentation, Aircraft manufacture, Engines and turbines, Non-domestic heating and ventilation equipment as well as Engineering consultancy. There have however been some offsetting gains in the manufacture of other general-purpose machinery. In Retail, growth has been static against a regional picture of 2.6% annual employment growth. What little growth there has been in areas such as Restaurants and Specialised shops is largely offset by small declines in most other retailing sectors and supportive storage and warehousing.

Overall, the Fareham economy has performed relatively well over the last five years and although some of the jobs will be as a result of companies shifting location, and most likely bringing existing employees with them, the future looks secure. The economy is diversified and not reliant on one or two very large industrial sectors, moreover the strength of the service sector suggests that the Borough is moving with the mainstream of industrial and commercial change. It is highly likely that the key ingredient in Fareham's success is location, location, location.

Table 12 - Fareham clusters summary

Cluster Number	Cluster Description	Employment 2004	Units 2004	LQ, SE Region base	Fareham CAGR	SE Region CAGR
Traded clusters						
2	Aerospace and Defence	4,450	350	1.345	6.5%	-3.8%
3	Analytical Instruments	2,950	275	1.126	-0.3%	-3.4%
4	Apparel	600	50	0.961	4.9%	0.4%
5	Automotive	4,500	375	1.461	-0.2%	-3.0%
6	Building Fixtures, Equipment and Services	1,950	150	1.990	2.1%	-4.2%
7	Business Services	12,000	1,325	0.888	2.2%	0.4%
8	Chemical Products	950	100	0.690	-5.3%	-3.7%
9	Communications Equipment	1,750	250	0.595	2.1%	-1.1%
10	Processed Food	3,900	150	2.171	4.0%	-0.8%
11	Agricultural Products	350	25	0.525	-1.1%	-2.3%
12	Distribution Services	3,500	375	0.931	1.2%	-2.2%
13	Education and Knowledge Creation	2,800	450	0.619	6.5%	2.3%
14	Advanced Manufacturing	5,700	350	1.446	-1.5%	-4.7%
15	Heavy Machinery	2,450	275	1.484	-3.2%	-3.1%
16	Financial Services	4,200	825	0.803	5.0%	0.7%
17	Fishing and Fishing Products	-	-	0.363	-15.6%	-6.3%
18	Footwear	550	25	1.961	-2.3%	-3.7%
19	Forest Products	50	25	0.313	-1.1%	-3.5%
20	Furniture	900	100	1.129	-3.0%	-2.7%
21	Heavy Construction Services	4,250	675	1.261	-0.6%	-1.5%
22	Leisure and Tourism	3,750	325	0.747	1.9%	1.4%
23	ICT	3,300	400	0.733	4.2%	0.6%
25	Jewellery and Precious Metals	50	25	0.625	-8.6%	-5.9%
26	Leather Products & Sporting Goods	500	25	2.347	-1.8%	-7.2%
27	Lighting and Electrical Equipment	800	50	1.387	-0.2%	-7.3%
30	Construction Materials	900	100	1.006	-2.7%	-2.1%
32	Medical Devices	1,000	175	0.470	-4.6%	-0.4%
33	Metal Manufacturing	5,300	400	2.003	-1.4%	-4.0%
34	Motor Driven Products	1,400	50	1.857	0.9%	-4.3%
36	Oil and Gas	2,350	350	0.913	-3.4%	-3.4%
39	Pharmaceuticals	1,750	85	0.388	-5.3%	1.0%
40	Plastics	1,200	175	1.128	1.2%	-2.3%
41	Power Generation	1,200	50	2.049	-2.9%	-6.8%
43	Prefabricated Enclosures	150	25	0.513	-9.6%	-7.3%
44	Production Technology	1,950	100	1.594	2.0%	-4.8%
45	Publishing and Printing	350	125	0.291	1.2%	-1.0%
47	Textiles	250	25	2.310	23.9%	-5.9%
49	Transportation and Logistics	2,700	200	1.320	3.0%	-3.5%
50	Marine	1,650	250	0.852	-4.2%	-2.4%
51	Retail	6,200	500	0.948	0.0%	2.6%
Local clusters						
L1	Local food and beverage processing and dist.	3,950	200	1.079	1.9%	0.9%
L2	Local personal services (non-medical)	500	75	1.328	1.6%	-0.3%
L3	Local health services	2,900	175	0.594	-0.1%	3.3%
L4	Local utilities	50	-	0.196	-9.9%	-1.9%
L5	Local logistical services	1,000	100	0.641	-7.0%	-0.8%
L6	Local housing and household goods and services	2,050	350	0.861	3.1%	2.4%
L9	Local personal transportation	900	150	0.859	-5.6%	-2.1%
L10	Local retail clothing and accessories	1,200	175	0.851	3.1%	2.6%
L11	Local entertainment and media	350	75	0.490	-3.1%	3.5%
L12	Local hospitality establishments	2,400	175	0.936	3.7%	3.1%
L13	Local commercial services	8,150	1,200	1.036	2.0%	0.5%
L14	Local education and training	3,650	100	1.137	3.9%	2.2%
L15	Local community and civic organizations	2,800	75	1.013	4.3%	2.0%
L16	Local construction and development	5,550	925	1.249	3.6%	-0.4%

Note: Traffic light coding: **Green** - significant, and growing faster than the regional average; **Amber** - significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average.

Section 5. Gosport

Summary - The area

Gosport is the smallest of the four districts both in terms of population and area. Gosport covers an area of 25sq km and has a population of approximately 79,000. Gosport's labour supply is around 47,000 people of whom 37,000 are either employed or self-employed. There are an estimated 26,000 jobs in the Borough and the stock of businesses both registered and unregistered may be as high as 2,900. The latest ABI data (2004) estimates that there are 18,700 employees working in 1,700 units. Gosport does not currently have enough jobs to satisfy local demand and therefore a significant proportion of the workforce commutes out of the town to find work.

The Gosport area's high points and clusters of potential




In total 15 SIC's out 514 separate categories of economic activity fulfil both the concentration and employment criteria (> 200 employees and LQ of 1.249+). A number of the larger sectors rely on a small number of large companies, establishments or a single plant. Grouping the high points together suggest a number of clusters of potential these include Aerospace and defence, Advanced manufacturing, Education and knowledge creation and Pharmaceuticals.

Size, concentration and employment growth

Putting together the information on cluster size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Amongst those that fulfil both criteria are Aerospace and defence, Analytical instruments, Advanced manufacturing, Marine and Local education and training. A number of clusters that fall below the 1.249 concentration threshold have grown significantly faster than the regional average, but in each case these have been relatively small in employment terms and have grown against a background of regional employment decline.

Winners, losers and those that may fly

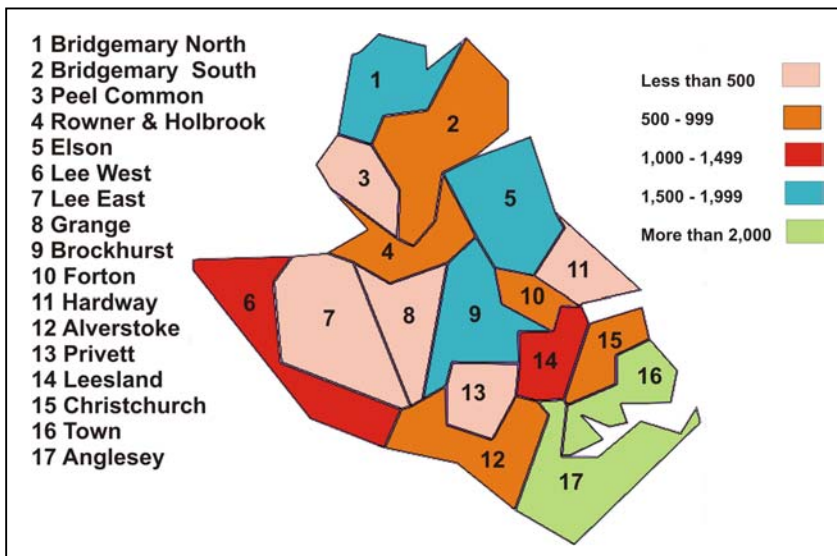
It is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light coding system. The three levels are: **Green** - significant, and growing faster than the regional average; **Amber** – significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average. All clusters account for more than 2,000 jobs each. The main results for Gosport area are:

Green 	Doing well	None identified
Amber 	With potential	Education and knowledge creation
Red 	Causing concern	Aerospace and defence, Analytical instruments, Advanced manufacturing, Marine.

The Gosport area profile

Gosport is the smallest of the four district areas, which constitute the AIF area, both in population and area terms. It covers an area of just 25sq km and has a population of 79,000.

As far as economic activity is concerned the APS estimates that the local supply of labour is almost 47,000 working age residents of these 39,000 (83%) are economically active and 95% of these (37,000) are either employed or self-employed. On the demand side, there are an estimated 26,000 jobs in Gosport, which is around 11% of all jobs in the AIF area. Clearly, Gosport does not currently have enough jobs to satisfy local demand and therefore almost 30% of the workforce will have to commute out of the Borough to work. In reality, the true figure for out-commuting is probably higher as there will also be some in-commuting. The DTI's SBS estimates that there were almost 1,200 VAT registered enterprises in Gosport at the beginning of 2005. Given the fact that a large percentage of self-employed and micro businesses are not registered for VAT, the true figure for the stock of local businesses could be as high as 2,900. The latest ABI data (2004) estimates that employment levels in Gosport are in the region of 18,700 people in almost 1,700 units (usually individual firms). The number of jobs has decreased by almost 3,400 (15%) in the last 5 years but the number of business units operating has increased by 6%.



Gosport like most other towns has clear concentrations of employment. The chart opposite shows that the central business district is located in Town and Anglesey wards. Town ward is the location of most of the town's retail activity and overall the ward accounts for almost 3,600 jobs. Anglesey is the second largest generator of

jobs (2,700), more than 50% of which are in the public sector mainly from various elements of MoD activity. The Brockhurst ward also has a large MoD presence. The largest concentration of manufacturing activity is in Bridgemary North ward, which is adjacent to the Borough of Fareham and the nearest location to the motorway. Smaller concentrations of both services and manufacturing are found in Elson and Rowner and Holbrook wards, both of which are accessible by the main feeder road, the A32. Four wards are mainly residential (Grange, Hardway, Lee West and Peel Common).

Gosport area's "high points"

Within the Gosport area 224 individual SIC's recorded some level of employment in 2004. These ranged in size from almost 1,900 people (in Defence activities) to just one. Out of these only 23

individual SIC's fulfilled the employment criteria (more than 200 people). However, 76 fulfilled the concentration criteria (LQ of >1.249) although some of these had employment levels as low as 10. In total 15 SIC's fulfilled both the concentration and employment criteria. It is these that are the local "high points" and the basis for building the Gosport long list of clusters. Table 13 below sets out the "high points" ranked by density (number of firms). Three of these "high points" are classified as being "deep", these are all in the service sector including two from the public sector. The SIC's classified as medium are all service sectors and all the manufacturing sectors (there are only three) are classified as shallow.

A noticeable feature of Table 13 is that the average LQ of the Gosport "high points" is significantly higher than other areas with Defence activities twenty times the regional average. This is because in a relatively small local economy such as Gosport the presence of one or two large employers skews the data so that there appears to be a significant local specialisation, in almost all cases this high LQ figure corresponds with a low figure for density.

Table 13 – Gosport "high points"

SIC Class 02	Class Description	Employment	Density	LQ, SE Region base
8010	Primary education	1,550	D	2.17
8531	Social work activities with accommodation	700	D	2.02
5540	Bars	600	D	1.54
5552	Catering	550	M	2.21
8042	Adult and other education not elsewhere classified	300	M	1.96
8512	Medical practice activities	250	M	1.53
7522	Defence activities	1,900	S	19.58
7310	Research and experimental development on natural sciences and engineering	750	S	5.07
2442	Manufacture of pharmaceutical preparations	350	S	4.60
8022	Technical and vocational secondary education	300	S	3.61
2522	Manufacture of plastic packing goods	300	S	27.57
3530	Manufacture of aircraft and spacecraft	250	S	4.93
7230	Data processing	200	S	6.39
5261	Retail sale via mail order house	200	S	10.12
5146	Wholesale of pharmaceutical goods	200	S	4.04

Source: ABI 2004; Note. 1 Employment figures have been rounded to the nearest 50.
Note 2. Firm density; D = >31 units, M = 10-31 units and S = <10 units.

Gosport's clusters of potential

Although there are few SICs in Gosport that have significant levels of employment it is possible to group these "high points" from Table 13 into potential clusters. Table 14 below shows the "high points" defined in Table 13 grouped into the amended ICIC defined clusters and the total number of jobs emanating from the "high point" sectors alone (where a potential cluster is comprised of a single "high point" it is excluded).

It is evident that some high point SIC's crop up in a number of different clusters, and in fact some clusters of potential are repeated. For instance, Aerospace and defence and Advanced manufacturing are the same combinations of SICs. As can be seen from Table 14 very few of the potential clusters

appear to have a critical mass from just the “high points” alone, in fact none are larger than 2,800 jobs. Of those that rely on a very small number of units the most obvious examples are Pharmaceuticals, Communications equipment and Distribution services. In order to identify the “strength in depth” of potential clusters it is necessary to review how clusters in their entirety perform in terms of employment, concentration and more importantly employment growth over the last five years. It is to this part of the analysis that we now turn.

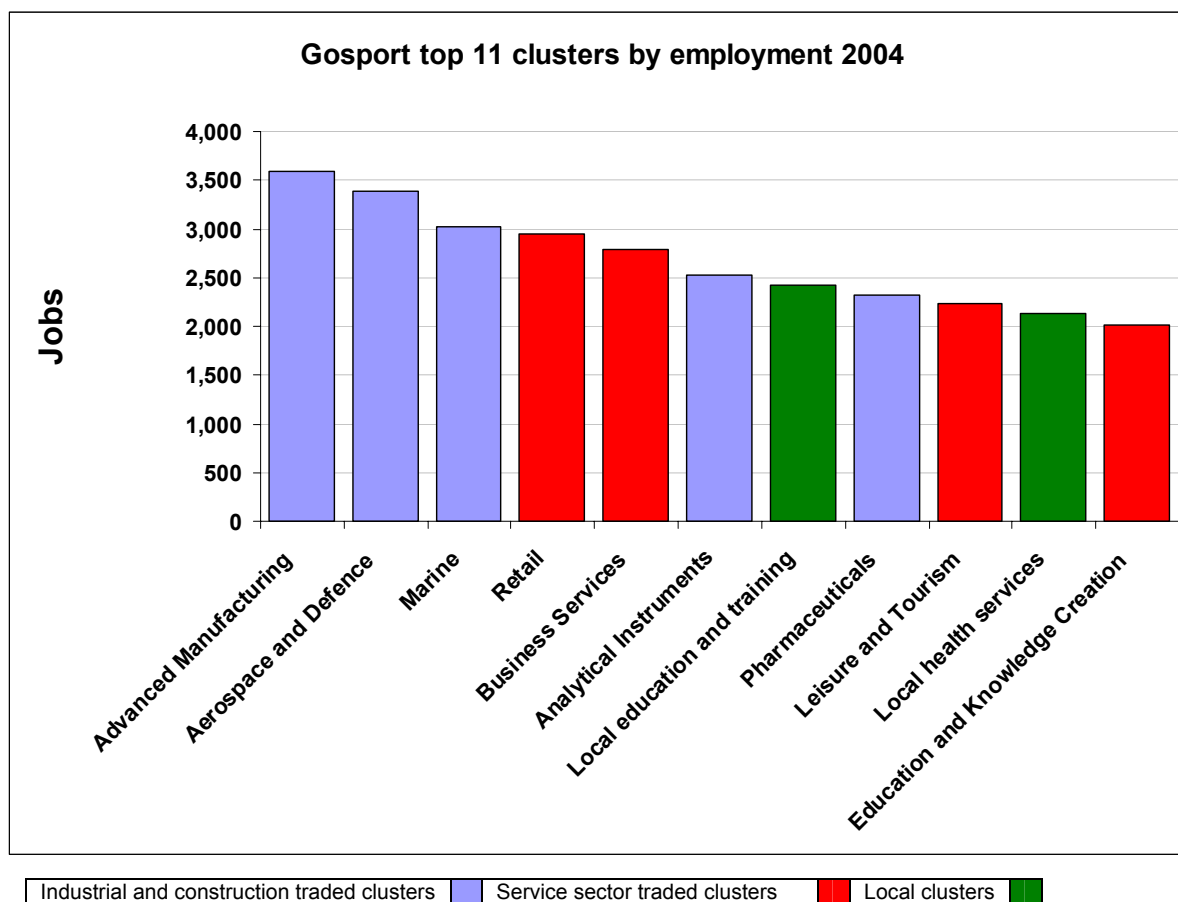
Table 14 Gosport “high points” grouped into potential clusters			
<i>Cluster Description</i>	<i>Gosport Area, High Points</i>	<i>Employment</i>	<i>No of Units</i>
Traded clusters			
Aerospace and Defence	3530; 7310; 7522	2,850	25
Advanced Manufacturing	3530; 7310; 7522	2,850	25
Marine	7310; 7522	2,650	25
Education and Knowledge Creation	7230; 7310; 8022; 8042	1,550	25
Pharmaceuticals	2442; 5146; 7310	1,300	-
Leisure and Tourism	5540; 5552	1,150	100
Medical Devices	2442; 7310	1,050	-
Motor Driven Products	3530; 7310	950	25
Communications Equipment	7230; 7310	950	-
ICT	7230; 8022; 8042	800	25
Automotive	8022; 8042	600	25
Business Services	7230; 8042	500	25
Distribution Services	5146; 5261	450	-
Local clusters			
<i>Local education and training</i>	<i>8010; 8022; 8042</i>	<i>2,150</i>	<i>50</i>
<i>Local hospitality establishments</i>	<i>5540; 5552</i>	<i>1,150</i>	<i>100</i>
<i>Local health services</i>	<i>8512; 8531</i>	<i>950</i>	<i>50</i>

Note 1. Employment rounded to nearest 50, units to nearest 25; Note 2. - = <13 units.

The main Gosport clusters by size

Whilst it must be remembered that individual SIC sectors may appear in one or more clusters there are across the Gosport area 11 clusters that might be regarded as highly significant in local employment terms. Each of these clusters accounted for more than 2,000 jobs in 2004. As can be seen from the graph on the next page, 9 of the 11 are traded clusters the other 2 are local clusters. Five of the traded clusters are mainly manufacturing based (Advanced manufacturing, Aerospace and defence, Marine, Analytical instruments and Pharmaceuticals). The other four are mainly service-based clusters such as Retail, Business services, Leisure and tourism and Education and knowledge. The largest of the traded clusters; Advanced manufacturing, Aerospace and defence and Marine employ more than 3,000 people each (though there is clearly some double counting as individual SICs (e.g. Defence activities) appear in each of the clusters).

The two local clusters are Local education and training and Health services both employing less than 2,500 people. The latter includes hospitals, pharmacies, medical and dental practices, health centres and social work activities including provision of residential care. However, it should be noted that elements of both of these public sector led clusters are also likely to appear in traded clusters because it is not possible to differentiate the amount of activity that relies purely on local demand.



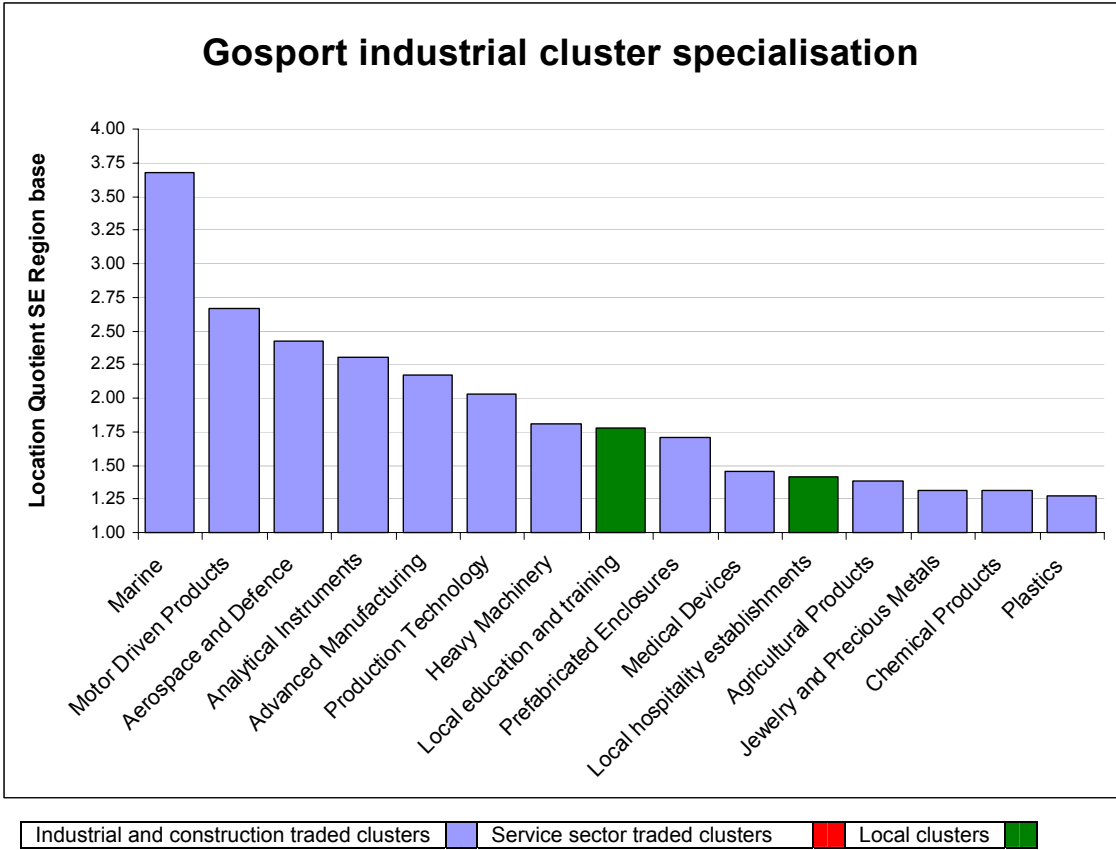
Significant Gosport clusters by concentration

Utilising the employment LQ measure that was previously used to identify individual sector high points, it is possible to rank the most important employment clusters in Gosport by their concentration. As with individual sectors those with an LQ greater than 1.249 are identified as being significant and can be expected to export their goods or services beyond the local economy. Again the baseline used is the average employment for each cluster within the Southeast Region.

The fact that a cluster has a high LQ doesn't necessarily mean that it generates a large amount of employment and equally a cluster with a lower LQ may well generate significant employment. For instance, Jewelry and precious metals has an LQ of almost 1.31 (31% above the Southeast average) but only generates around 50 jobs whereas ICT produces over 1,100 jobs but has an LQ of 0.61 (39% below the regional average).

The most noticeable feature of the graph on the following page is that there are many more clusters above the concentration threshold than in Portsmouth and they also tend to exhibit quite high LQ's. In contrast to employment, only two of the 15 clusters featured is non-manufacturing (both are local service related clusters). This contradicts the finding of the individual high points that Gosport's niche is in the public and service sectors. The other notable point is that six clusters that are broadly

engineering based (Marine, Motor driven products, Aerospace and defence, Analytical instruments, Advanced manufacturing and Production technology) have concentration rates more than twice the regional average.



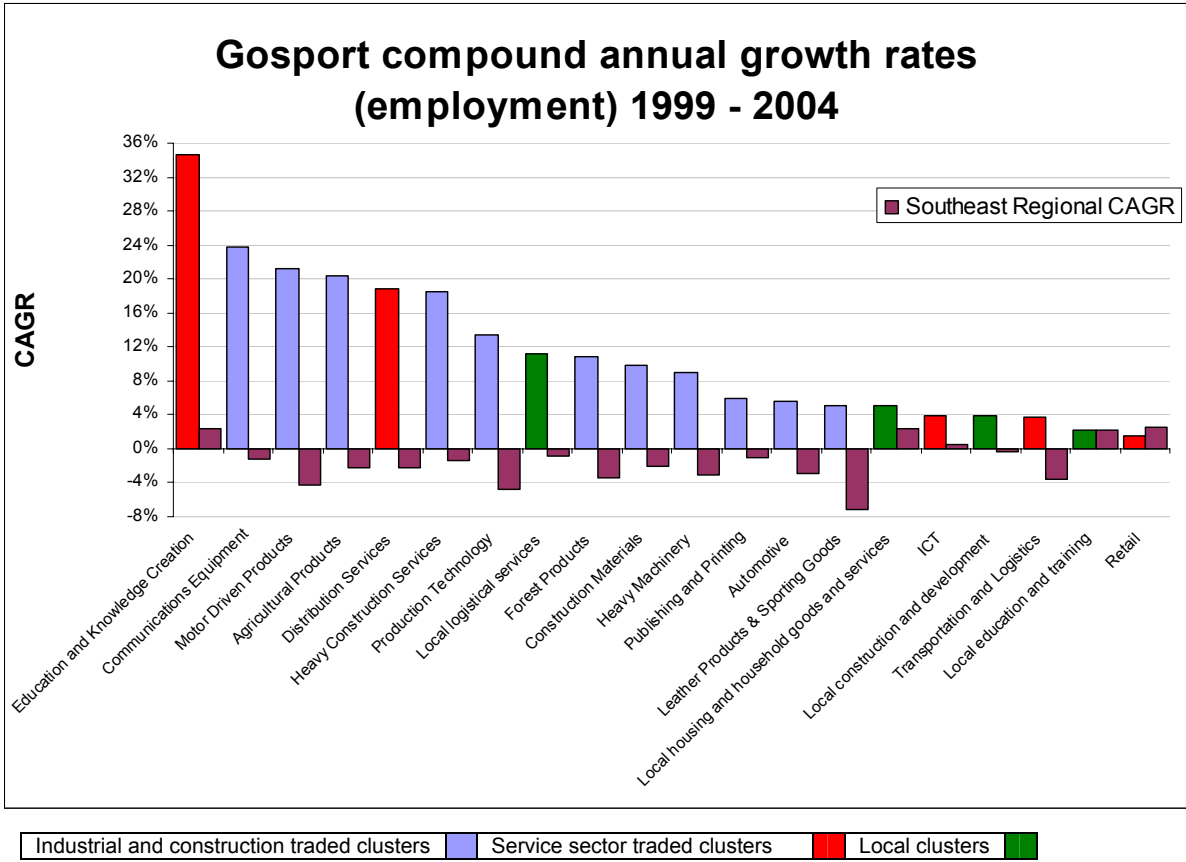
Putting together the information on size and concentration it is possible to identify a short list of clusters that are significant in terms of both size and concentration. Those that fulfil both criteria are Advanced manufacturing, Aerospace and defence, Marine, Analytical instruments, and Local education and training. There are however, a number of clusters that fall below the threshold of 1.249 but nevertheless generate significant employment. Amongst this category are Retail, Business services, Education and knowledge creation and Local health services. The crucial question is whether or not the significant sectors are growing or shrinking in terms of employment and it is to that question that we now turn.

Gosport’s compound annual growth rates of employment

If clusters are to be used to drive forward the local economy then the optimal strategy is to invest time and effort in those, which have the most potential to grow. The next part of the analysis examines employment growth rates comparing the compound annual growth rate (CAGR) locally with that regionally. The graph on the following page shows that 20 of the 54 traded and local clusters have CAGR’s of more than 1% per annum, slightly more than the AIF area in general.

In more than two thirds of the clusters (15) the local rate of growth contrasts with decline regionally (e.g. Communications equipment, Motor driven products and Distribution services). Out of the other five three are growing faster than the regional average (Education and knowledge creation, Local housing and household goods and services and ICT) the other two Local education and training and Retail have grown at a slower rate. Interestingly, only one of the five clusters that have high levels of employment and concentration are featured in the graph (Local education and training) and it is growing at a slower annual rate than the regional average.

Generally speaking, the graph suggests that Gosport has growth but that this is not in clusters that are large and significantly concentrated. This may mean that the Gosport economy is showing signs of diversification with growth spreading to smaller clusters, but the more worrying aspect is that in almost all the clusters where growth is occurring it is reducing in the regional economy. The other warning sign is that a number of these clusters are relatively low-tech, just the sort of activities that are increasingly shifting to off-shore locations. Unlike Havant and Fareham, Gosport does not have good logistical connections which tend to have a positive effect on commercial land values and it may be that the town is attracting low value added clusters for just that reason. These factors suggest that the Gosport economy is particularly vulnerable.



Drawing together the various strands it is possible to identify clusters that may warrant further detailed investigation. These have been classified in a traffic light system as follows:

Green employment (2,000+), concentrated (LQ 1.25+) and CAGR 1% above regional average

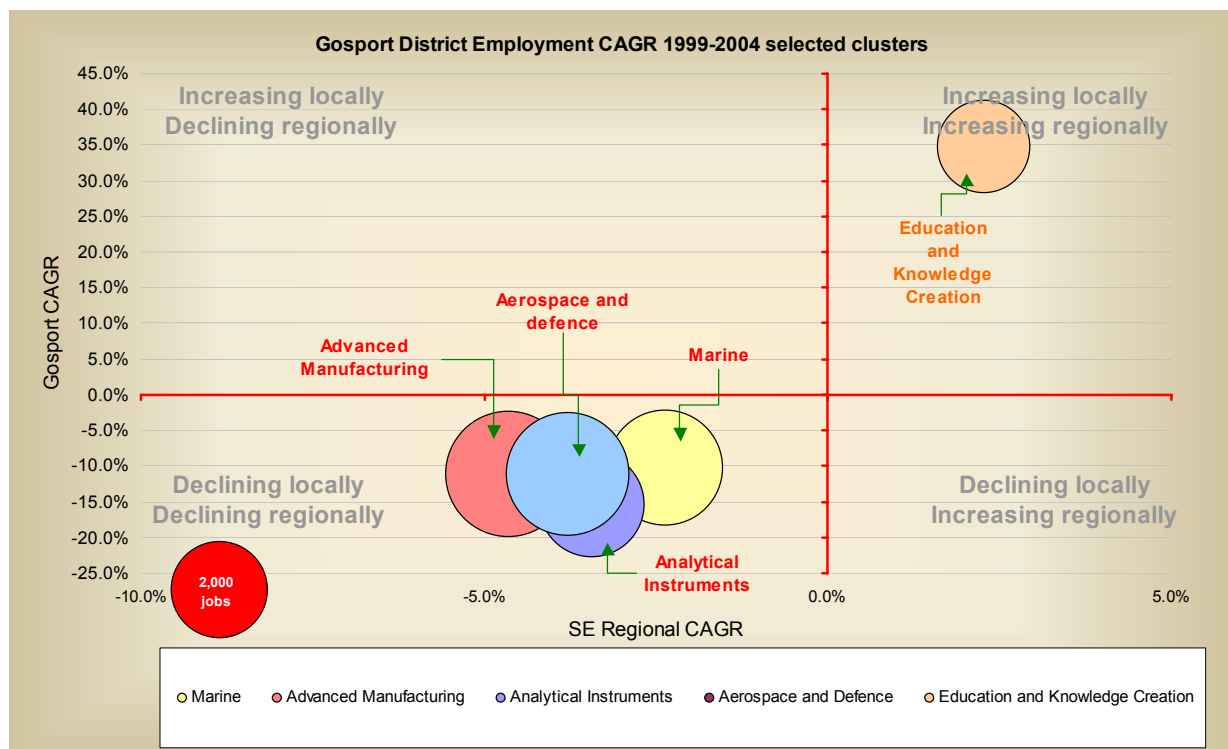
Amber employment (2,000+), concentration 0.85 – 1.24 and CAGR 1% above regional average

Red employment (2,000+), concentrated but CAGR 1% below regional average

Note: that clusters with a negative growth rate that is less than the regional decline are not included.

Gosport winners, losers and those that may fly

The bubble chart below identifies those clusters classified as green, amber or red and should be studied alongside the cluster summary table (Table 15). As can be seen there is one cluster in the amber category all the others are red. The declining clusters were all identified as both large in employment terms and concentrated.



The Education and knowledge creation cluster has grown significantly faster than the regional average over the last five years but still has an LQ of only 5% above the regional average. It may be that the cluster has just been catching up with previous regional growth or that it is part of a trend whereby the local economy is moving away from manufacturing towards knowledge based services. However, closer inspection suggests that it is significant increases in four SICs (7230 Data processing, 7310 R&D, 8022 Technical & vocational secondary education and 8042 Adult and other education) that is driving the process. In combination these four SIC's are responsible for 1,500 additional jobs. The most plausible explanation is that these are not in fact new jobs, but the result of changes to the designation of particular establishments. For instance, the increase in R&D in Anglesey ward

correlates with the run down in defence activities and is almost certainly a result of QinetiQ taking over the activities of the Defence Research and Evaluation Agency. In a similar way the transfer of military activities such as pay and aspects of training to the private sector in the late 1990's is picked up as a switch of activity from defence activities to data processing and adult and other education. A factor also impacting on education is the changed designation of some secondary education establishments to technical and vocational education and adult and other education. Thus the growth in this Gosport cluster is most likely illusory rather than real.

The prime drivers of the run down in the four manufacturing-based clusters in Gosport (Advanced engineering, Aerospace and defence, Analytical instrument and Marine) are manufacture and repair of aircraft and defence activities. Whilst the impact of the loss of defence jobs, is partially offset by switching to service-based clusters (Education and knowledge creation and ITC), the real reductions in aircraft manufacture are compounded by job losses in manufacture of general-purpose machinery and electronic valves. Although it may be argued that this suggests that job losses are not as bad as they appear at first sight, there are, however, few if any compensating gains in important clusters such as Advanced manufacturing, Marine and Aerospace. This is probably best illustrated by ship and boat building and repair, where despite some switching of firms between SIC's 3511 and 3512 over the period, there has been a steady ebb of employment since 1999 resulting in an employment reduction of just over a third.

On the face of it there are six other clusters in Gosport that have seen significant employment gains although they fall outside the traffic light categories for one reason or another. These are Automotive, Communications equipment, Heavy machinery, Heavy construction services, Production technology and Distribution services. In each case the cluster appears to have grown locally whilst declining regionally. In the case of the first five the effect is a result of the switching of MoD R&D to the private sector and educational activities from mainstream schooling to vocational based secondary education. The exception is Distribution services where there have been real increases in storage and warehousing and mail order and switches from manufacture to wholesaling in pharmaceuticals and other machinery (SIC 5187).

Two other clusters that have under-performed are worthy of mention. First, the loss of jobs in the Pharmaceuticals cluster is the result of a reduction in manufacturing of pharmaceuticals (partly offset by gains in wholesale of pharmaceuticals), the associated manufacture of plastic packaging goods and reductions in hospital services (primarily RN). Most of these losses are associated with the activities of two plants within the borough. Second, against the grain of the rest of the AIF area, Gosport has seen a reduction of around 250 jobs in the Leisure and tourism cluster. Jobs have been lost in catering and bars with a slight upturn in restaurants. However, the significant increases in leisure and recreation SIC's experienced in Portsmouth has clearly not penetrated to the other side of the harbour. Finally, despite a small increase in employment, the Retail cluster has grown at a slower

rate than the regional average, this is because the increase is reliant on mail order and storage whereas face-to-face retailing employment has declined in almost every SIC.

Out of the four areas Gosport is unique in that it is the only district that has seen a net loss of jobs over the five-year period. Its' economy is the smallest and the most orientated towards low-tech sectors. It is also very heavily dependant on a few key industry sectors, mainly connected with the MoD. This makes the economy extremely vulnerable to political decisions taken outside the area. It has also failed to make much headway in Retail, Business services or Leisure and Tourism. At the start of the period the Borough was dependant on surrounding areas for employment and this situation has since deteriorated further. The appearance is of an economy in decline and a great deal of effort will be required to turn things around.

Table 15 - Gosport clusters summary

Cluster Number	Cluster Description	Employment 2004	Units 2004	LQ, SE Region base	Gosport CAGR	SE Region CAGR
Traded clusters						
2	Aerospace and Defence	3,400	100	2.422	-11.1%	-3.8%
3	Analytical Instruments	2,550	75	2.300	-15.4%	-3.4%
4	Apparel	1,500	25	0.601	-10.1%	0.4%
5	Automotive	1,350	150	1.040	5.5%	-3.0%
6	Building Fixtures, Equipment and Services	300	50	0.732	-11.4%	-4.2%
7	Business Services	2,800	375	0.490	-1.4%	0.4%
8	Chemical Products	750	50	1.313	-10.0%	-3.7%
9	Communications Equipment	1,300	50	1.052	23.8%	-1.1%
10	Processed Food	600	50	0.769	-6.4%	-0.8%
11	Agricultural Products	400	-	1.387	20.5%	-2.3%
12	Distribution Services	1,450	100	0.911	18.8%	-2.2%
13	Education and Knowledge Creation	2,000	125	1.052	34.7%	2.3%
14	Advanced Manufacturing	3,600	100	2.169	-11.2%	-4.7%
15	Heavy Machinery	1,250	75	1.809	8.9%	-3.1%
16	Financial Services	900	225	0.397	-1.3%	0.7%
17	Fishing and Fishing Products	-	-	0.575	-7.8%	-6.3%
18	Footwear	50	-	0.561	0.0%	-3.7%
19	Forest Products	100	-	0.935	10.8%	-3.5%
20	Furniture	200	25	0.580	-2.1%	-2.7%
21	Heavy Construction Services	1,550	200	1.094	18.4%	-1.5%
22	Leisure and Tourism	2,250	2508	1.050	-0.4%	1.4%
23	ICT	1,150	100	0.612	4.0%	0.6%
25	Jewellery and Precious Metals	50	25	1.317	-11.8%	-5.9%
26	Leather Products & Sporting Goods	50	-	0.854	5.1%	-7.2%
27	Lighting and Electrical Equipment	50	25	0.238	-15.3%	-7.3%
30	Construction Materials	300	50	0.790	9.8%	-2.1%
32	Medical Devices	1,300	50	1.459	0.5%	-0.4%
33	Metal Manufacturing	1,250	150	1.145	-8.3%	-4.0%
34	Motor Driven Products	850	25	2.672	21.2%	-4.3%
36	Oil and Gas	550	100	0.520	-0.7%	-3.4%
39	Pharmaceuticals	2,300	25	1.205	-0.9%	1.0%
40	Plastics	600	50	1.274	-4.1%	-2.3%
41	Power Generation	250	-	0.954	-4.0%	-6.8%
43	Prefabricated Enclosures	200	25	1.706	-2.0%	-7.3%
44	Production Technology	1,050	50	2.030	13.4%	-4.8%
45	Publishing and Printing	200	25	0.431	5.9%	-1.0%
47	Textiles	50	-	0.574	-30.3%	-5.9%
49	Transportation and Logistics	550	100	0.631	3.8%	-3.5%
50	Marine	3,000	100	3.672	-10.2%	-2.4%
51	Retail	2,950	325	1.069	1.5%	2.6%
Local clusters						
L1	Local food and beverage processing and distribution	1,550	110	1.010	-2.2%	0.9%
L2	Local personal services (non-medical)	150	25	1.079	-7.3%	-0.3%
L3	Local health services	2,150	100	1.035	0.2%	3.3%
L4	Local utilities	50	-	0.257	-1.0%	-1.9%
L5	Local logistical services	500	50	0.779	11.2%	-0.8%
L6	Local housing and household goods and services	750	175	0.748	5.0%	2.4%
L9	Local personal transportation	250	75	0.528	-6.7%	-2.1%
L10	Local retail clothing and accessories	450	100	0.720	0.9%	2.6%
L11	Local entertainment and media	200	25	0.677	-0.8%	3.5%
L12	Local hospitality establishments	1,550	175	1.419	-2.9%	3.1%
L13	Local commercial services	1,600	325	0.487	1.0%	0.5%
L14	Local education and training	2,400	50	1.781	2.1%	2.2%
L15	Local community and civic organizations	1,000	50	0.866	-1.3%	2.0%
L16	Local construction and development	1,150	275	0.604	3.8%	-0.4%

Note: Traffic light coding: **Green** - significant, and growing faster than the regional average; **Amber** - significant, growing faster than the regional average but not specialised; **Red** - significant and specialised but declining faster than the regional average.

Appendix 1. Local economic clusters explained

Lets see if we can explain clusters in simple language.

Q. What is a cluster?

A. A cluster is a collection of business activities (therefore firms and their attendant employment), which are “related” to one another. They are broadly related in 3 ways. First by the generic output (product or service) they make, for instance in the Aerospace and defence cluster you would expect to find manufacture of aircraft and spacecraft. Secondly, they may also use extensively the same or similar inputs (components or services) in producing their output. For instance, general mechanical engineering is a major input to aircraft manufacture. Finally, they may be dependant on a small number of major customers. In the case of aerospace this will be national defence and civilian air transport.

Q. How do we know there is a connection?

A. There are a number of steps. First, each company or workplace is identified by one of 514 separate Standard Industrial Classifications (SIC) these group together similar activities i.e. Shipbuilding and repair. Second, we can identify the main types of product and service that broad industrial sectors buy and sell to one another and the general public by using the national input output tables. These show the structure of the economy via a matrix. Finally, the Institute for Competitive Inner Cities (ICIC) have constructed 40 traded and 14 local clusters based on research in the US. These have been subsequently amended using the UK industrial structure, definitions already in use by organisations such as the DTI, ONS, OECD etc. and local knowledge (for instance, in the local economy of South Hampshire shipbuilding is a key component of the Aerospace and defence cluster)

Q. What are local and traded clusters?

A. A local cluster is one where activity primarily feeds the local market, in other words there is very little export content either abroad or to the rest of the UK. An example would be local construction and development. A traded cluster on the other hand, is likely to have export content and a clear example would be Pharmaceuticals. In others, such as Business Services and Retail, it might be slightly less clear cut. Traded clusters are also sub-divided into those that are manufacturing or service based.

Q. Can an industrial activity appear in more than one cluster?

A. Yes there is considerable crossover between different clusters. Some activities such as research and development crop up in a number of clusters (11). Overall if we counted each component of all the clusters it would scale up the number SICs by a factor of 2.6. However, when we examine clusters we look at them individually comparing like with like, we do not aggregate them together.

Q. Where does the original data come from and how recent is it?

A. The data is from the Annual Business Enquiry (ABI) this is an annual survey of companies conducted by ONS in December every year, which most companies have to complete. The current ABI has been running since 1998 and the most recent data is for 2004, data is usually released one year after the survey takes place. Whilst the survey does not contain “perfect” data, it is the best that is available for local areas. It contains information on the number of business units and employment.

Q. So how do you decide which clusters are the most important in the local economy?

A. We have utilised the methodology used by Trends Business Research for the DTI in 2001 when they examined regional clusters. The methodology has a number of steps. First we look at the whole economy and identify the “high points”. These are individual SICs, which contain a minimum of 0.2% of local employment and have a local concentration ratio of at least 1.25 (this means that there is 25% more employment in that SIC than the national or regional average). The number of companies in each SIC is also examined to determine how embedded the SIC is (does it depend on a large number of firms or just one or two). Second, the individual “high points” are matched to the list of clusters this produces a long list of potential clusters, where a cluster is composed of only a single SIC it is rejected as insignificant. Third, all clusters are examined to identify those that are already significant to the local economy and growing, those that are not yet significant but are growing ahead of trend and finally those that are significant but declining faster than trend.

Q. But doesn't this give you an awful long list of clusters?

A. Yes, but we have developed cut off points to reduce the number to a manageable size. First, to be significant the cluster has to have a concentration ratio of at least 1.25, this shows that the cluster is specialised and eliminates those that are not that important or trundling along at about the national average (in most local economies this would include retail). Second, there must be a large pool of employment. A key rationale for the existence of a cluster is that employees are interchangeable amongst firms within the cluster bringing similar skills and expertise. For the AIF area the cut off point is 5,000 jobs within a complete cluster, for the districts 2,500 jobs (2,000 in Gosport). Third, we look at whether or not employment has been growing or reducing over the last five years. The benchmark is that the compound annual growth rate of employment (CAGR) should be at least 1% higher than the regional average for the cluster. The final list uses a traffic light type code to differentiate between those clusters that are doing well, have potential or are causing concern.

Q. Traffic lights?

A. Yes, this gives a simple easy to understand system of identifying the most important clusters. The three levels are: **Green** employment (5,000/ 2,500+), concentrated (LQ 1.25+) and CAGR 1% above regional average; **Amber** employment (5,000/ 2,500+), concentration 0.85 and 1.24 and CAGR 1% above regional average; **Red** employment (5,000/ 2,500+), concentrated (LQ 1.25+) but CAGR declining 1% faster than the regional average. Clusters with a negative growth rate that is less than the regional decline are not included.

Q. Can the clusters be tracked year on year?

A. Yes, we have set up the data in a database, which can be rolled forward, this way we can track the fortunes of both SICs and clusters on a consistent basis for years to come. This includes what is happening to growth rates. The annual updating of the database should be a relatively easy matter.

Q. Is that the end of it?

A. Far from it, this is just the beginning. Having identified the most significant and interesting clusters, these should then be examined in more depth to see just what it is that makes them so important. We have carried out a preliminary, superficial investigation but as with the Portsmouth City Growth Project this needs to be refined to see if particular parts of the main cluster have the potential to drive growth in the local economy.