Cambridge Growth Update 2016 Data Draw

Cambridge Ahead Seminar 8th March 2017

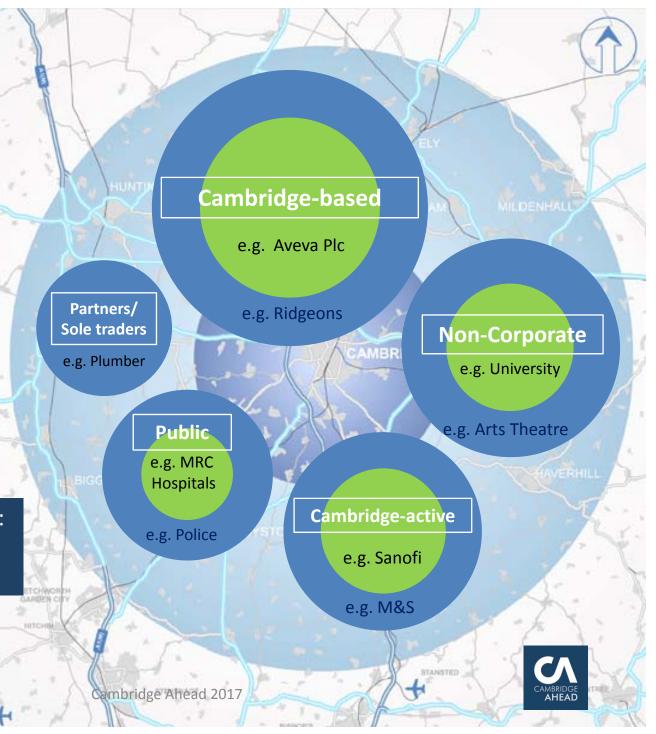


Methods (1)

Knowledge Intensive

Not Knowledge Intensive

Cambridge economy 2010-16: 20 mile 'bullseye' radius around Cambridge/TTWA



Methods (2)

 Cambridge based companies = companies registered or with principal trading location in Cambridge

Companies House Accounts/FAME	Consolidated Accounts FY/Apr-Apr
Name	84 SIC Sectors
Employment (total plus surveyed local)	Turnover
Place	Over time

• Cambridge active companies = Non-Cambridge registered companies with active unit in Cambridge

Company Accounts word search	Local knowledge/Networks
Name	84 SIC Sectors
Place	Over time

Non-corporate/public body laboratories in Cambridge

Survey	University offices
Name	Sector
Place	Employment
Over time	



Methods (3)

- Annual snapshot April 2015 April 2016
- Aiming for annual actuals, plus trend changes in the active corporate population in Cambridge
- 4 factors need adjustments
 - i. Acquisitions: since 2011, transactions amounting to \$46bn for Cambridge companies eg CSR, Domino, ARM; subsequent corporate reorganisations result in gradual shift from Cambridge based to Cambridge active; transitional companies monitored and back trends adjusted
 - ii. Cambridge active companies: e.g. Amazon and Apple; scale of investments increasing, but need to get data on Cambridge employee numbers; will otherwise understate KI/employment and growth in region; surveys to track Cambridge data
 - iii. Immigrant companies: e.g. Astra Zeneca, with £16.7bn in turnover and 60,100 global employees, 2,000 in Cambridge; unusual in becoming Cambridge based; parallel numbers for a while
 - iv. Global vs Cambridge employment: size effects; trends may diverge; eg Kier Holdings (£2.5bn turnover/15,000 global employees/? in Cambridge region) largest Cambridge based company, with a national construction business; surveys to track Cambridge content annually

Cambridge Cluster Map

- Annual data from 2010-11 to 2015-16.
- Cambridge based, Cambridge active and researchbased non-corporates.
- New companies added when have at least one year of accounts (so a lag in showing new formations).
- Shows only those alive in 2015-16 with data for the past six years, or years since formation if more recent.
- Some improvements to the cluster map (see below).
- Next two slides drawn from the cluster map.



Cambridge-based companies (2015-2016)

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw	2015-16				
	Number of companies	Total employment	%	Total Turnover £,000	%
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	3,031	20,624	10%	3,524,276	10%
Life science and healthcare	431	13,054	6%	3,426,812	10%
High-tech Manufacturing	571	21,128	10%	4,202,334	12%
Knowledge intensive services	692	5,736	3%	864,812	2%
TOTAL KI SECTORS	4,725	60,541	29%	12,018,234	34%
OTHER SECTORS					
Primary	705	11,628	6%	1,859,882	5%
Manufacturing	1,210	16,906	8%	3,142,031	9%
Wholesale and retail distribution	2,241	18,239	9%	5,792,446	16%
Construction and utilities	2,900	35,786	17%	6,742,062	19%
Transport and travel	610	5,121	2%	612,447	2%
Property and finance	2,974	9,996	5%	1,209,495	3%
Other business services	5,008	22,539	11%	2,266,988	6%
Other services	2,867	11,886	6%	833,384	2%
Education, arts, charities, social care	1,244	17,600	8%	1,164,673	3%
TOTAL NON-KI SECTORS	19,759	149,700	71%	23,623,409	66%
TOTAL ALL SECTORS	24,484	210,241	100%	35,641,643	100%



Cambridge-based companies growth

Whole Cambridge Ahead Area Companies		THREE YEARS CHANGE					
(i.e. companies based here) 2016 draw		20	2012-13 to 2015-16				
	Employment	Employment % change pa	Turnover £,000	Total Turnover % change pa			
KNOWLEDGE INTENSIVE SECTORS							
Information technology and communications	4,221	7.9%	761,295	8.5%			
Life science and healthcare	2,702	8.0%	1,269,657	16.7%			
High-tech Manufacturing	1,930	3.2%	432,526	3.7%			
Knowledge intensive services	1,195	8.1%	117,554	5.0%			
TOTAL KI SECTORS	10,047	6.2%	2,581,031	8.4%			
OTHER SECTORS							
Primary	1,798	5.8%	309,027	6.2%			
Manufacturing	2,401	5.2%	358,053	4.1%			
Wholesale and retail distribution	1,780	3.5%	772,682	4.9%			
Construction and utilities	10,157	11.8%	1,847,508	11.3%			
Transport and travel	581	4.1%	94,108	5.7%			
Property and finance	1,405	5.2%	255,620	8.2%			
Other business services	2,016	3.2%	168,112	2.6%			
Other services	3,035	10.3%	197,498	9.4%			
Education, arts, charities, social care	4,481	10.3%	40,357	1.2%			
TOTAL NON-KI SECTORS	27,653	7.0%	4,042,965	6.5%			
TOTAL ALL SECTORS	37,700	6.8%	6,623,997	7.1%			
% Knowledge Intensive	27%		39%				

^{*} Includes acquisition effects, but not AstraZeneca or Cambridge-active companies



Cambridge-based companies growth (Q1 2015-16)

- Growth continued at around 7% on a 1, 3 and 5 year view
- Company stock increased in 2015-16 by 5.5% to 24,580;
 - Life sciences (+14.3%), transport/travel (+7.3%) and construction (+7.3%)
- Global turnover in 2015-16 up 7.6% to £35.7bn; global employment up 7.6% to 210,292
 - Life sciences turnover and employment high at +32.1% and 10.5%;
 other services and ICT also buoyant
- KI sector turnover growth consistently slightly higher, employment growth slightly lower on 1, 3 and 5 year view
 - KI Services turnover dropped by £15.5m due to Bayer Crop Sciences and Displaylink
- KI intensity remains high at 34% of turnover and 29% of employment



CBR Cambridge companies database

- The database contains companies that have died over the six year period.
- Another way of analysing annual changes is to examine growth due to births, deaths and the growth of companies that were alive in both years.
- This is different from examining the growth performance over the past six years of the set of companies alive in 2015-16.
- In the period 2014-15 to 2015-16 death includes those companies that have moved out of the area and birth includes those that have moved into the area.
- Death also includes companies that are no longer providing accounts for their Cambridge entity as before (eg CSR, Cambridge Water, Domino Printing Sciences).
- Some companies have not yet reported their 2015-16 results and we takes these as unchanged from the previous year. We are likely to find some of these have died.

Changes in company numbers in the last year

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
NUMBER OF COMPANIES	2014-15 TOTAL	Continuing 2014-15	Died	Continuing 2015-16	Born	2015-16 TOTAL
KNOWLEDGE INTENSIVE SECTORS						
Information technology and communications	2,875	2,576	299	2,576	455	3,031
Life science and healthcare	364	345	19	345	86	431
High-tech Manufacturing	547	511	36	511	60	571
Knowledge intensive services	647	593	54	593	99	692
TOTAL KI SECTORS	4,433	4,025	408	4,025	700	4,725
OTHER SECTORS						
Primary	653	636	17	636	69	705
Manufacturing	1,129	1,054	75	1,054	156	1,210
Wholesale and retail distribution	2,082	1,913	169	1,913	328	2,241
Construction and utilities	2,606	2,444	162	2,444	456	2,900
Transport and travel	541	492	49	492	118	610
Property and finance	2,677	2,522	155	2,522	452	2,974
Other business services	4,574	4,135	439	4,135	873	5,008
Other services	2,431	2,222	209	2,222	645	2,867
Education, arts, charities, social care	1,166	1,081	85	1,081	163	1,244
TOTAL NON-KI SECTORS	17,859	16,499	1,360	16,499	3,260	19,759
TOTAL ALL SECTORS	22,292	20,524	1,768	20,524	3,960	24,484
% Knowledge Intensive	20%	20%	23%	20%	18%	19%



Changes in employment in the last year

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
EMPLOYMENT	2014-15 TOTAL	Continuing 2014-15	Died	Continuing 2015-16	Born	2015-16 TOTAL
KNOWLEDGE INTENSIVE SECTORS						
Information technology and communications	20,916	18,297	2,619	19,643	981	20,624
Life science and healthcare	11,825	11,597	228	12,675	379	13,054
High-tech Manufacturing	21,558	19,043	2,515	19,886	1,242	21,128
Knowledge intensive services	5,213	5,129	84	5,566	170	5,736
TOTAL KI SECTORS	59,512	54,066	5,446	57,769	2,772	60,541
OTHER SECTORS						
Primary	11,071	11,032	39	11,356	272	11,628
Manufacturing	15,257	14,964	293	15,900	1,006	16,906
Wholesale and retail distribution	16,639	16,340	299	17,353	886	18,239
Construction and utilities	32,040	31,100	940	34,702	1,084	35,786
Transport and travel	4,671	4,595	76	4,856	265	5,121
Property and finance	8,361	8,067	294	8,606	1,390	9,996
Other business services	20,040	19,253	787	20,079	2,460	22,539
Other services	10,677	9,890	787	10,576	1,310	11,886
Education, arts, charities, social care	16,213	16,071	142	17,140	460	17,600
TOTAL NON-KI SECTORS	134,970	131,313	3,657	140,567	9,133	149,700
TOTAL ALL SECTORS	194,483	185,380	9,103	198,336	11,905	210,241
% Knowledge Intensive	31%	29%	60%	29%	23%	29%



Changes in turnover in the last year

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
TURNOVER £,000	2014-15 TOTAL	Continuing 2014-15	Died	Continuing 2015-16	Born	2015-16 TOTAL
KNOWLEDGE INTENSIVE SECTORS						
Information technology and communications	3,760,342	3,197,643	562,699	3,403,422	120,854	3,524,276
Life science and healthcare	2,583,629	2,565,264	18,365	3,379,227	47,585	3,426,812
High-tech Manufacturing	3,936,763	3,566,126	370,637	3,686,150	516,184	4,202,334
Knowledge intensive services	874,484	866,415	8,068	849,102	15,709	864,812
TOTAL KI SECTORS	11,155,217	10,195,448	959,769	11,317,901	700,332	12,018,234
OTHER SECTORS						
Primary	1,696,437	1,691,266	5,171	1,739,639	120,243	1,859,882
Manufacturing	3,003,163	2,961,438	41,725	3,003,321	138,710	3,142,031
Wholesale and retail distribution	5,453,340	5,386,414	66,926	5,572,064	220,382	5,792,446
Construction and utilities	6,215,665	6,075,993	139,672	6,559,292	182,770	6,742,062
Transport and travel	562,619	552,899	9,720	577,471	34,976	612,447
Property and finance	1,063,753	1,029,478	34,275	1,029,663	179,833	1,209,495
Other business services	1,939,432	1,859,375	80,057	2,021,285	245,703	2,266,988
Other services	726,298	681,763	44,535	737,677	95,707	833,384
Education, arts, charities, social care	1,067,161	1,059,518	7,643	1,113,972	50,702	1,164,673
TOTAL NON-KI SECTORS	21,727,867	21,298,143	429,724	22,354,383	1,269,026	23,623,409
TOTAL ALL SECTORS	32,883,084	31,493,591	1,389,493	33,672,285	1,969,358	35,641,643
% Knowledge Intensive	34%	32%	69%	34%	36%	34%



Contributions to employment growth in the last year

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw	2014-15 to 20	15-16			
EMPLOYMENT GROWTH	Continuing firms' effect	Death effect	Born effect	Total growth	Continuing firms' growth rate
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	6%	-13%	5%	-1%	7%
Life science and healthcare	9%	-2%	3%	10%	9%
High-tech Manufacturing	4%	-12%	6%	-2%	4%
Knowledge intensive services	8%	-2%	3%	10%	9%
TOTAL KI SECTORS	6%	-9%	5%	2%	7%
OTHER SECTORS					_
Primary	3%	0%	2%	5%	3%
Manufacturing	6%	-2%	7%	11%	6%
Wholesale and retail distribution	6%	-2%	5%	10%	6%
Construction and utilities	11%	-3%	3%	12%	12%
Transport and travel	6%	-2%	6%	10%	6%
Property and finance	6%	-4%	17%	20%	7%
Other business services	4%	-4%	12%	12%	4%
Other services	6%	-7%	12%	11%	7%
Education, arts, charities, social care	7%	-1%	3%	9%	7%
TOTAL NON-KI SECTORS	7%	-3%	7%	11%	7%
TOTAL ALL SECTORS	7%	-5%	6%	8%	7 %



Contributions to turnover growth in the last year

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw	2014-15 to 20	15-16			
TURNOVER GROWTH	Continuing firms' effect	Death effect	Born effect	Total growth	Continuing firms' growth rate
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	5%	-15%	3%	-6%	6%
Life science and healthcare	32%	-1%	2%	33%	32%
High-tech Manufacturing	3%	-9%	13%	7%	3%
Knowledge intensive services	-2%	-1%	2%	-1%	-2%
TOTAL KI SECTORS	10%	-9%	6%	8%	11%
OTHER SECTORS					
Primary	3%	0%	7%	10%	3%
Manufacturing	1%	-1%	5%	5%	1%
Wholesale and retail distribution	3%	-1%	4%	6%	3%
Construction and utilities	8%	-2%	3%	8%	8%
Transport and travel	4%	-2%	6%	9%	4%
Property and finance	0%	-3%	17%	14%	0%
Other business services	8%	-4%	13%	17%	9%
Other services	8%	-6%	13%	15%	8%
Education, arts, charities, social care	5%	-1%	5%	9%	5%
TOTAL NON-KI SECTORS	5%	-2%	6%	9%	5%
TOTAL ALL SECTORS	7%	-4%	6%	8%	7 %



Changes in the four years 2010-11 to 2014-15

- One way of summarising the previous four years is to aggregate the four sets of annual changes.
- This is presented in the next three tables.



Growth in company numbers in the four years to 2014-15

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw					
NUMBER OF COMPANIES	2010-11 TOTAL	Died	Continuing cos growth	Born	2014-15 TOTAL
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	2,278	-753	0	1,350	2,875
Life science and healthcare	264	-38	0	138	364
High-tech Manufacturing	474	-76	0	149	547
Knowledge intensive services	460	-86	0	273	647
TOTAL KI SECTORS	3,476	-953	0	1,910	4,433
OTHER SECTORS					
Primary	559	-78	0	172	653
Manufacturing	1,002	-197	0	324	1,129
Wholesale and retail distribution	1,707	-415	0	790	2,082
Construction and utilities	2,085	-508	0	1,029	2,606
Transport and travel	419	-91	0	213	541
Property and finance	2,225	-356	0	808	2,677
Other business services	3,650	-1,177	0	2,101	4,574
Other services	1,639	-575	0	1,367	2,431
Education, arts, charities, social care	819	-182	0	529	1,166
TOTAL NON-KI SECTORS	14,105	-3,579	0	7,333	17,859
TOTAL ALL SECTORS	17,581	-4,532	0	9,243	22,292
% Knowledge Intensive	20%	21%		21%	20%



Growth in employment in the four years to 2014-15

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw					
EMPLOYMENT	2010-11 TOTAL	Died	Continuing cos growth	Born	2014-15 TOTAL
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	15,124	-1,248	4,965	2,075	20,916
Life science and healthcare	9,380	-110	1,863	692	11,825
High-tech Manufacturing	18,475	-325	3,084	324	21,558
Knowledge intensive services	4,137	-216	912	380	5,213
TOTAL KI SECTORS	47,116	-1,899	10,824	3,471	59,512
OTHER SECTORS					
Primary	8,868	-172	1,860	515	11,071
Manufacturing	13,675	-1,087	1,751	918	15,257
Wholesale and retail distribution	14,968	-822	1,101	1,392	16,639
Construction and utilities	25,785	-1,137	5,506	1,886	32,040
Transport and travel	4,121	-145	434	261	4,671
Property and finance	6,755	-686	349	1,944	8,361
Other business services	16,403	-2,424	183	5,878	20,040
Other services	7,325	-1,006	1,623	2,735	10,677
Education, arts, charities, social care	7,415	-456	2,764	6,490	16,213
TOTAL NON-KI SECTORS	105,315	-7,935	15,572	22,019	134,970
TOTAL ALL SECTORS	152,431	-9,834	26,396	25,490	194,483
% Knowledge Intensive	31%	19%	41%	14%	31%



Growth in turnover in the four years to 2014-15

Whole Cambridge Ahead Area Companies					
(i.e. companies based here) 2016 draw					
TURNOVER £,000	2010-11 TOTAL	Died	Continuing cos growth	Born	2014-15 TOTAL
KNOWLEDGE INTENSIVE SECTORS					
Information technology and communications	2,875,818	-157,055	738,156	303,422	3,760,342
Life science and healthcare	1,786,289	-18,213	754,081	61,472	2,583,629
High-tech Manufacturing	3,162,691	-34,783	768,068	40,787	3,936,763
Knowledge intensive services	623,526	-27,182	244,383	33,757	874,484
TOTAL KI SECTORS	8,448,324	-237,232	2,504,687	439,438	11,155,217
OTHER SECTORS					
Primary	1,236,322	-22,648	406,948	75,814	1,696,437
Manufacturing	2,383,183	-133,168	667,428	85,719	3,003,163
Wholesale and retail distribution	4,356,950	-138,927	1,000,025	235,292	5,453,340
Construction and utilities	4,709,404	-177,762	1,315,973	368,050	6,215,665
Transport and travel	489,339	-17,774	59,994	31,060	562,619
Property and finance	703,300	-77,134	202,456	235,131	1,063,753
Other business services	1,600,860	-332,504	187,438	483,638	1,939,432
Other services	474,115	-54,456	145,285	161,354	726,298
Education, arts, charities, social care	519,651	-23,458	-183,240	754,207	1,067,161
TOTAL NON-KI SECTORS	16,473,123	-977,829	3,802,307	2,430,266	21,727,867
TOTAL ALL SECTORS	24,921,447	-1,215,061	6,306,994	2,869,704	32,883,084
% Knowledge Intensive	34%	20%	40%	15%	34%



Size distribution of Cambridge companies

- The Cluster Map allows you to interrogate the data by size classes.
- The next few tables separates companies into four size classes based on their employment size at the start of any year.
- The next table shows the size distribution of firms in 2015-16, our latest year of data.
- The following three tables examines their contributions to the growth of company numbers, employment and turnover over the five years to 2015-16.



Cambridge-based companies (2015-2016)

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
2015-16	Number of Cos	%	Employment	%	Turnover £,000	%
1 employee	12,383	51%	13,805	7%	1,585,606	4%
2 - 9 employees	10,007	41%	33,102	16%	4,687,351	13%
10 - 99 employees	1,846	8%	49,710	24%	7,712,412	22%
100 or more employees	248	1%	113,625	54%	21,656,274	61%
ALL COMPANIES	24,484	100%	210,241	100%	35,641,643	100%



Contributions to company numbers growth in the last five years by size

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
NUMBER OF COMPANIES	2010-11 TOTAL	Died	Continuing cos growth	Born	2015-16 TOTAL	% growth contribution
1 employee	9,979	-4,883	0	10,450	15,546	81%
2 - 9 employees	5,986	-1,247	0	2,406	7,145	17%
10 - 99 employees	1,433	-158	0	299	1,574	2%
100 or more employees	183	-12	0	48	219	1%
ALL COMPANIES	17,581	-6,300	0	13,203	24,484	100%



Contributions to employment growth in the last five years by size

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw EMPLOYMENT	2010-11 TOTAL	Died	Continuing cos growth	Born	2015-16 TOTAL	% growth contribution
1 employee	9,978	-4,883	11,027	10,450	26,572	29%
2 - 9 employees	21,176	-3,779	4,043	7,415	28,855	13%
10 - 99 employees	36,266	-3,859	6,188	8,200	46,795	18%
100 or more employees	85,011	-6,416	18,095	11,330	108,020	40%
ALL COMPANIES	152,431	-18,937	39,353	37,395	210,241	100%



Contributions to turnover growth in the last five years by size

Whole Cambridge Ahead Area Companies						
(i.e. companies based here) 2016 draw						
TURNOVER £,000	2010-11 TOTAL	Died	Continuing cos growth	Born	2015-16 TOTAL	% growth contribution
1 employee	1,149,822	-594,321	1,374,764	1,268,094	3,198,360	19%
2 - 9 employees	2,804,476	-489,644	720,297	967,902	4,003,030	11%
10 - 99 employees	5,650,469	-455,366	1,224,645	1,122,454	7,542,202	18%
100 or more employees	15,316,681	-1,065,224	5,165,982	1,480,612	20,898,051	52%
ALL COMPANIES	24,921,447	-2,604,554	8,485,688	4,839,062	35,641,643	100%



Non-corporate research sector growth

- Much bigger population of non corporate KI/Post docs than recognised
- Growth rate of over 5% pa over past three years e.g. last year:
 - Sanger site 2,436; +6.4%
 - MRC units 1,272; +0.5%
 - Cambridge University 12,858; +1.9%
 - CU Press and Assessments 2,896; +3.4%
 - Anglia Ruskin 2,480; -4.3%
 - Hospitals 10,922; +13.7%
- Other charitable/science entities included in company list
 - Alzheimer's Research
 - Flora and Fauna International
 - NIAB
- Large equivalent to 56% of KI company employment and growing e.g. Sanger expansion plans
- Impacts on rental housing demand



CAMBRIDGE BASED RESEARCH INSTITUTIONS

Science/Research Institute Employment	2012-13	2013-14	2014-15	2015-16
British Antartic Survey	311	309	329	335
EMBL- European Bioinformatics Institute	561	586	620	686
Wellcome Trust Sanger Institute	1259	1365	1467	1535
Hinxton Hall	179	189	202	215
MRC Mitochondrial Biology Unit	110	112	115	113
MRC Laboratory of Molecular Biology	680	723	750	764
MRC Human Nutrition Research Centre	157	162	175	164
MRC Cognition and Brain Sciences Unit	141	146	147	144
MRC Biostatistics Unit	74	77	79	87
PHG Foundation (Population Health& Genomics Foundation)	17	20	22	22
British Society of Plant Breeders	n.a.	11	11	12
Royal Society of Chemistry	392	446	517	504
CASP- Cambridge Arctic Shelf Programme	23	25	23	31
Hitachi Cambridge Laboratory	n.a.	22	23	21
UN Environmental Programme-World Conservation	93	108	117	117
Cambridge University *	6730	7143	7465	7694
Cambridge University research students	4658	4731	4805	4819
Cambridge Colleges **		349	349	345
Cambridge University Press #		1068	1152	1087
Cambridge Assessment (UCLES) ##		1468	1650	1809
Anglia Ruskin University - Cambridge Campus	1502	1521	2153	1984
Anglia Ruskin University - Cambridge Campus research students	340	396	438	496
The Pathology Partnership	n.a.	n.a.	378	411
Cambridge University Hospitals (Addenbrooke's) ***	4255	4382	4464	4668
Cambridge and Peterborough NHS Foundation Trust ****	1205	1223	1210	2235
Papworth Hospital	1551	1671	1779	1794
Hinchingbrooke Hospital	1535	1584	1776	1814
TOTAL	25773	29837	32351	32279

Cambridge active companies

2016 draw	2015-16
CAMBRIDGE ACTIVE COMPANIES	Number of companies
KNOWLEDGE INTENSIVE SECTORS	combanics
Information technology and communications	68
Life science and healthcare	34
High-tech Manufacturing	55
Knowledge intensive services	26
TOTAL KI SECTORS	183
OTHER SECTORS	
Primary	23
Manufacturing	101
Wholesale and retail distribution	211
Construction and utilities	57
Transport and travel	42
Property and finance	61
Other business services	62
Other services	101
Education, arts, charities, social care	74
TOTAL NON-KI SECTORS	732
TOTAL ALL SECTORS	915
% Knowledge Intensive	20%

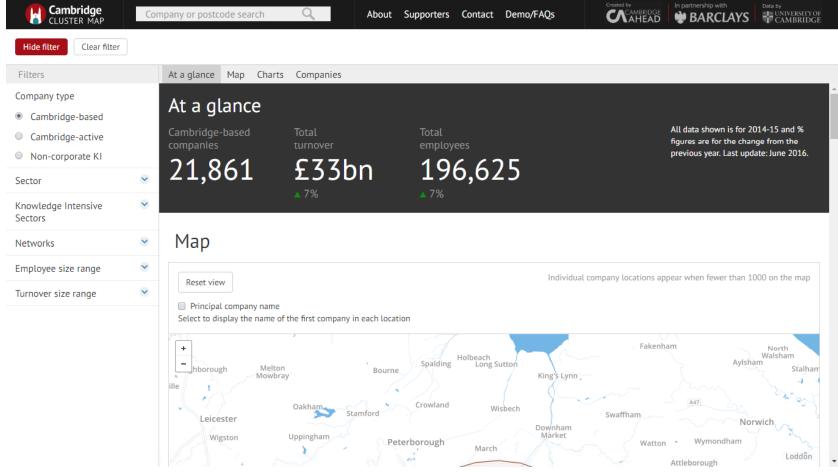


Cluster Map Changes

- Data update including adding 2015/16 data
- Functionality updates
 - Introduce Narrow filter to enable further 'drilling down' of data (basically 'subsectors').
 - Scale-ups now available
 - Unique URLs for company profile pages enabling easy sharing
- Usability updates include the display of estimated data in red (previously it was in black as for actual data), but only for latest year.
- Content updates/improvements
 - Add 1 new network One Nucleus (CA will add Cambridge Clean Tech in early Summer, making three networks)
- Company profile improvements
 - Add URL on company profile
 - Display sub-sector details on company profile
 - Display logo(s) for selected network on company profile
 - Director details updated



The Cambridge Cluster Map





Survey on impact, constraints and forecasts

- Surveyed 74 of top companies
- Delayed by Brexit vote; ongoing now and would welcome higher response rate
- 34% response rate (25 companies) covering 23,061 employees (11.0% of cluster map total) and turnover of £4.3bn (12.0% of cluster map total)
- NEED more responses!
- Impacts outside region (why HMG should care)
- Local constraints on growth
- Their views on local sectoral growth rates over ~5 years
- Brexit concerns and impacts



Cambridge employment content

- Weakness of our data is that our figures are for global employment and turnover, but we are most interested in Cambridge area employment.
- This can be estimated for smaller businesses but for the largest 200 companies, we need them to supply this information.
- The survey has had partial success, but we still need to hear from about 100 recalcitrants.
- For this group of companies, Cambridge growth is slower, but still fast.

Cambridge Content S	Survey		Total no of employees 2015		_	_	_
TOTAL SAMPLE		26,471	24,058	21,697	12,346	11,432	10,436
% Cambridge content					47%	48%	48%
120 Companies	Global growth las year %pa	2 vears	Cambridg growth las year %pa	growth last t 2 years			
	10.0%	10.5%	8.0%	8.8%			



Conclusions

- Steady, high growth rates maintained in Cambridge based companies and non-corporate labs
 - ICT remains strong: IoT, AI, and semiconductors
 - Life sciences seeing strong growth in mid-sized companies and research base
- Excludes Astra Zeneca effects, which would add 47% to global turnover and 29% to global employment and 100% to global KI employment
- Also excludes impacts of inward investment by Cambridge active companies
- Growing internationalisation of Cambridge business and research base
- Need to be able to track Cambridge content, particularly employment

