Dorset's Local Industrial Strategy

Developing our economic future – evidence base

Introduction

This document summarises evidence that has been gathered to guide discussions for the Dorset Local Industrial Strategy (LIS)

It is not a comprehensive description of the DLEP economy, but a concise document that outlines the key issues facing the area – its audience are local partners and Government

This evidence highlights a number of strengths, opportunities, weaknesses and threats, particularly with regards to improving absolute and relative productivity within the DLEP area

Its aim is to provide one of the starting points for wider discussions on local priorities, and begin to think how the LIS could improve local economic conditions

It is part of a wider evidence exercise undertaken to support the development of a Dorset LIS – it should be considered alongside the strategic narrative and 'deep dives' that are also taking place

It also aims to provide the baseline upon which progress against the Dorset LIS can subsequently be monitored

Contents

This evidence base is structured to provide evidence against the economic foundations for boosting productivity and earnings - as detailed in the Industrial Strategy. The document has the following sections:

1. Summary of productivity trends – high-level description of Dorset's recent performance
2. Ideas and innovations – evidence of the innovation capacity and capabilities within the local economy
3. People & skills – demographics and labour supply and demand, current and projections
4. Infrastructure – evidence and objectives of local housing, infrastructure and transport plans
5. Business environment – productivity, business structure and growth
6. Place – spatial characteristics and distribution
7. Grand challenges – summary of evidence relating to the Grand Challenges and how the DLEP economy could help meet those challenges
8. Conclusions – what does the evidence suggest for LIS priorities?
9. References – summary table of available evidence with links where appropriate

Area for consideration – key specific challenges for DLEP area

The evidence indicates the following key challenges to inclusive productivity growth:

- People & Skills - Addressing the 'demographic crunch' the area faces – the need for a smarter and more productive workforce (producing more with fewer labour resources) and enabling people to live healthier for longer
- Ideas & Innovation - Encouraging greater aggregate innovation activity – within businesses, research institutions and public service providers. Building on established research strengths
- Infrastructure – Key improvements in intra and inter regional physical and digital connectivity
- Business – Finding effective ways of assisting the 'long tail' of less productive businesses
- Place - Spreading the benefits of projected growth to more disadvantaged individuals and communities – promoting 'inclusive growth'
- Cross-cutting - Harnessing its high quality and unique natural resources to ensure local decisions are based on the principles of 'net gain' – protecting and enhancing the natural environment
- Some of these challenges are being analysed further in a series of 'deep dives' to help our understanding of where the DLEP area is positioned
- Where can the LIS be most effective in tackling these challenges?

Data and evidence – points of interpretation

In April 2019 Bournemouth, Poole and Christchurch councils merged to create a new predominantly urban local authority area

At the same time, Dorset Council became a unitary authority – predominantly covering the rural areas & settlements

The old district local authorities – and the two-tier local government system – ceased to exist

It is important to highlight that given that this reorganisation has just occurred, much of the available published data (principally from ONS) has not yet adjusted to reflect the new structure

As a consequence, for some datasets it is not possible for the data to reflect the new local government structure

In most cases, this evidence base attempts to reflect conditions at a DLEP level. However, where appropriate and relevant, data may be presented in different ways. In some instances, data/evidence may still relate to the old Dorset CC area – including Christchurch. It has not been in the scope of this work to 're-engineer' the data

It is expected over time, most published data will begin to reflect the new local authority structure

PRODUCTIVITY TRENDS:

SUMMARY

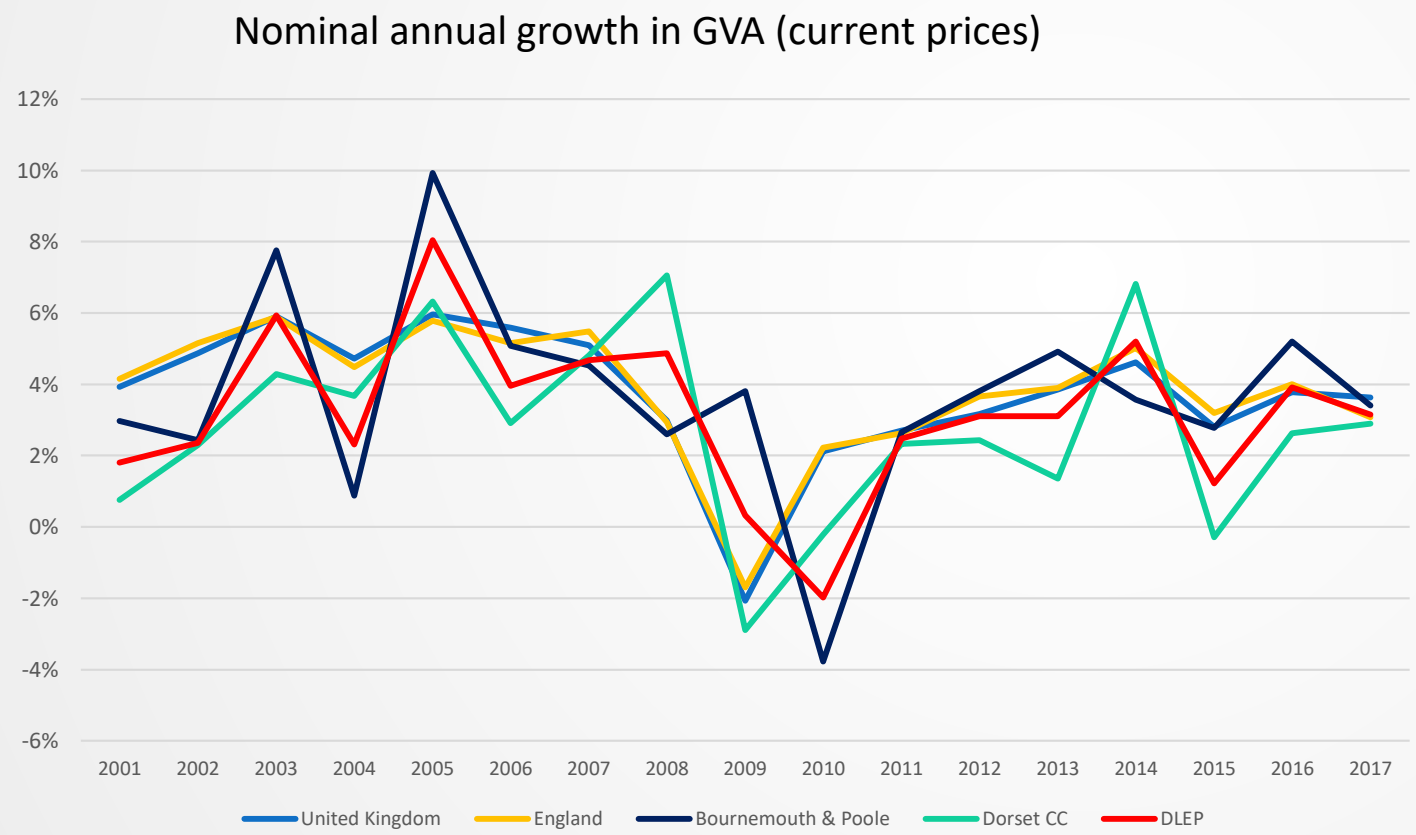
Productivity: summary of evidence

Productivity in the DLEP area is below average and the gap to the UK average remains persistent (the 'output gap'):

- Growth has been relatively weak in overall terms (although excluding London and Greater South East the differences are not that marked)
- Differences in productivity levels at a national level appear driven by differences in service sector productivity between London and GSE and the rest of the UK
- Indications are that the gap between areas within the DLEP area have been gradually widening
- In particular, sparsely populated rural areas tend to be associated with lower productivity levels
- Certainly, not all residents have shared in economic growth – creating conditions for more inclusive growth remains important
- Research suggests that differences in firm-level productivity – rather than industrial structure – mostly explains the differences at a regional level
- However, differences in the industrial structure within areas (such as within DLEP) can explain some of the intra-regional differences

Productivity – nominal growth (overall)

Growth in output (GVA) has been marginally below national trends, although marginally higher in Bournemouth & Poole – slower growth in (old) Dorset CC area



(Source: Regional Gross Value Added (income approach) - ONS)

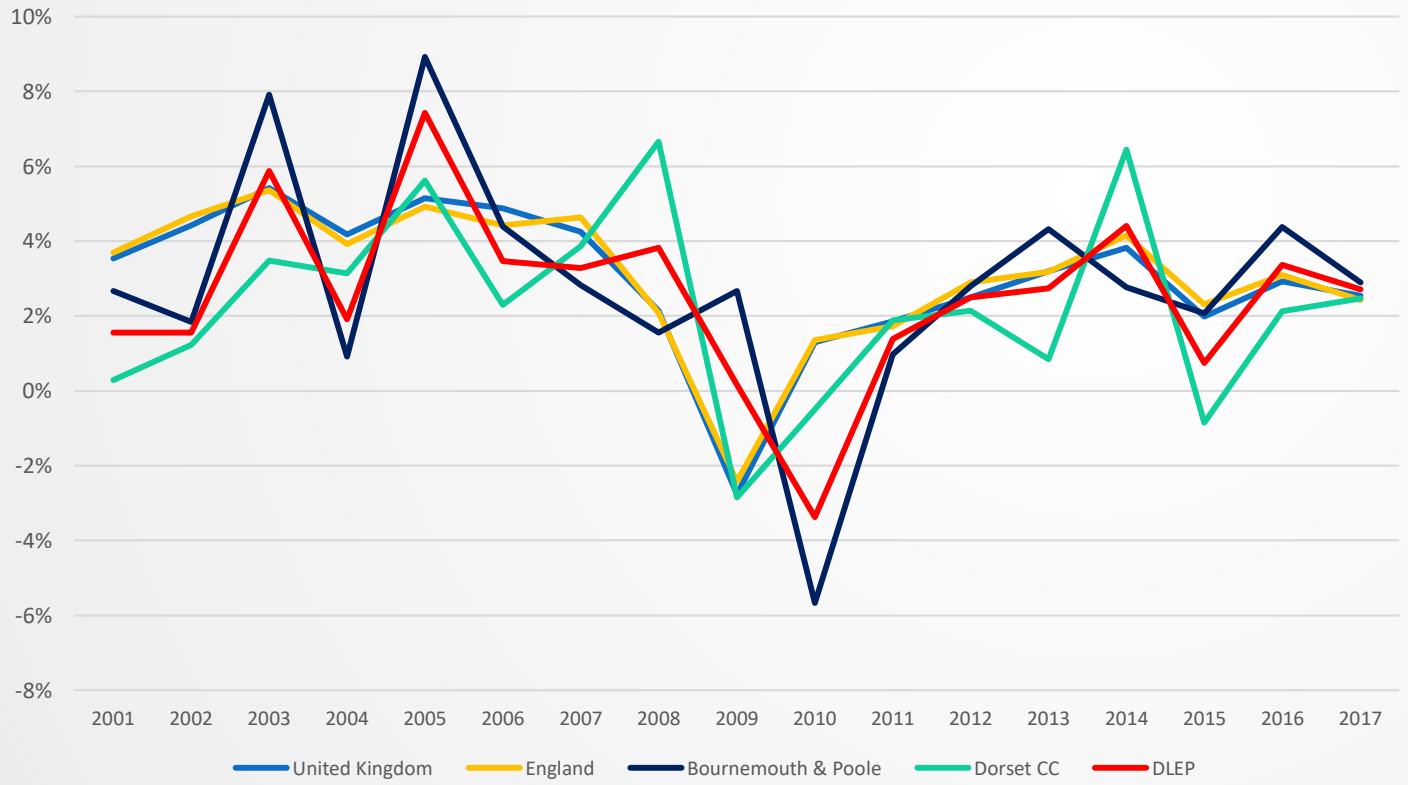
	Average nominal growth (2011-17)
United Kingdom	3.5%
England	3.6%
Bournemouth & Poole	3.8%
Dorset CC	2.6%
DLEP	3.2%

- National trends heavily driven by growth in London and Greater South East
- Workplace measurement so growth in urban area partly driven by those who commute in from rural areas

Productivity – nominal growth (per head)

Growth in output (GVA) per head reflected overall trend in output growth (although more muted due to population growth) - marginally higher historical growth in urban area

Nominal annual growth in GVA per head (current prices)



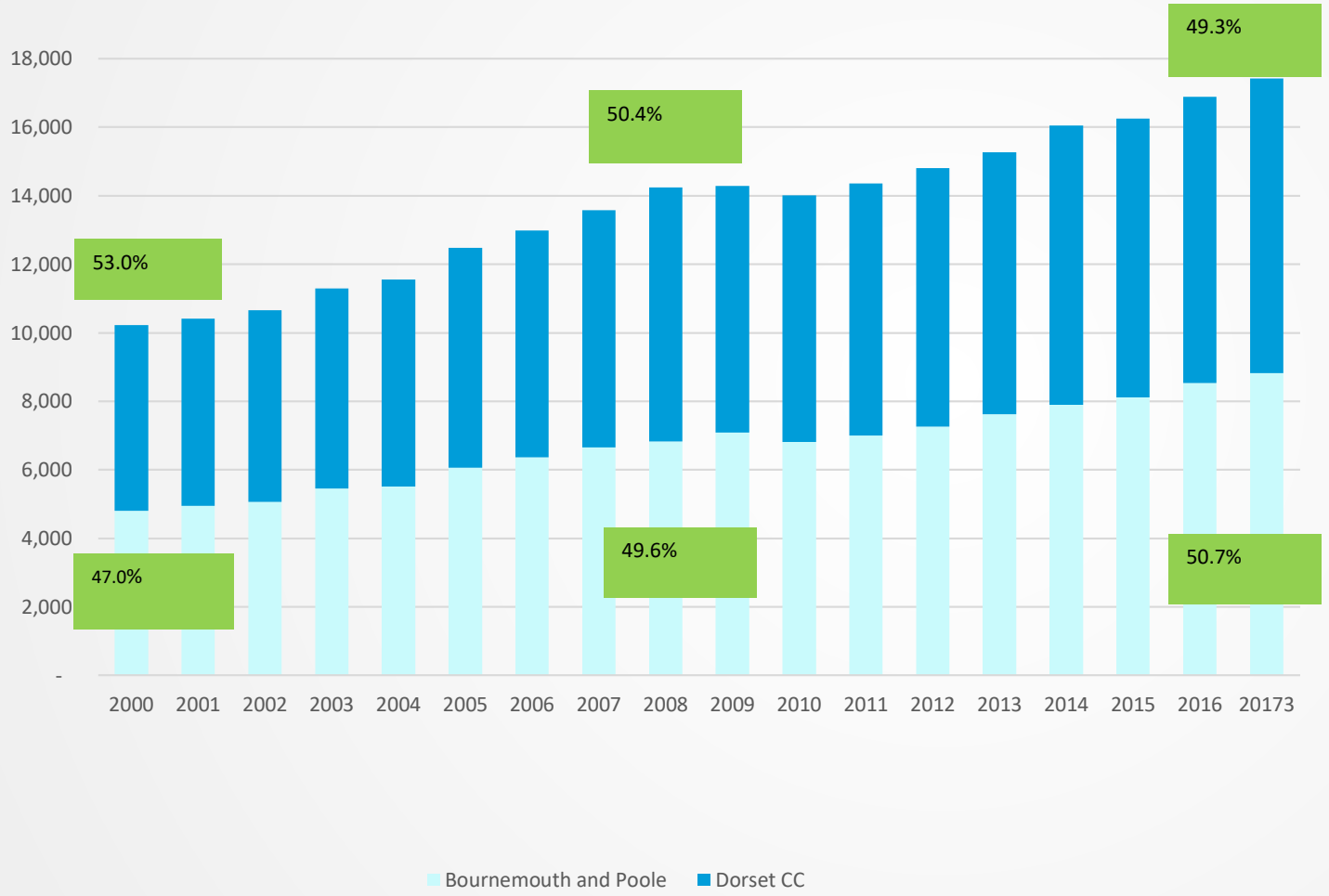
	Average nominal growth – GVA per head (2011-17)
United Kingdom	2.7%
England	2.8%
Bournemouth & Poole	2.9%
Dorset CC	2.2%
DLEP	2.5%

- Differential between urban and rural narrows due to differing population growth

(Source: Regional Gross Value Added (income approach) - ONS)

Output – locational distribution

Gross Value Added by location (% share of DLEP total output)



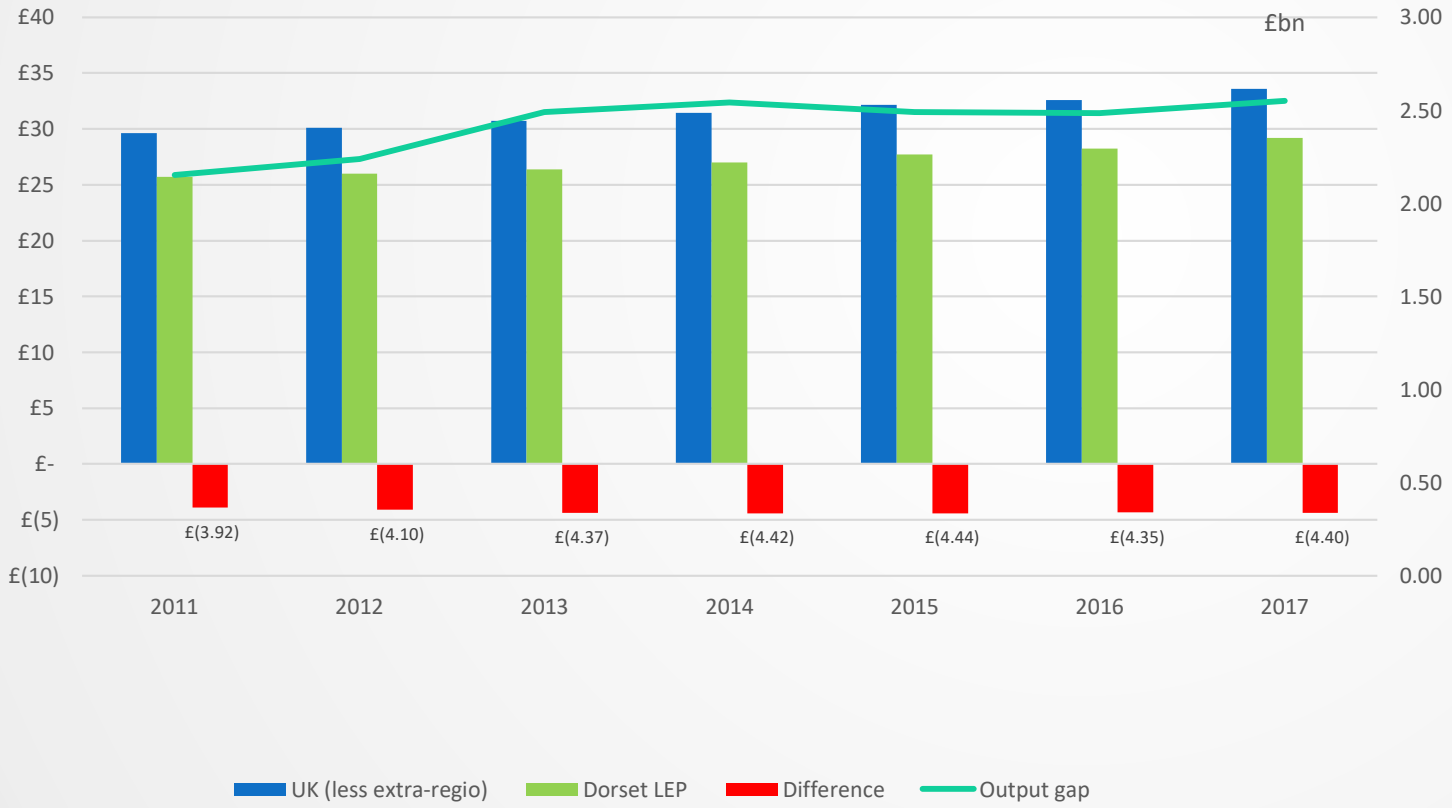
- Subtle shift of increasing share (of total DLEP output) associated with Bournemouth & Poole over the long-term
- However, most of this shift occurred in lead-up to downturn – only minor/marginal changes since
- Changes in an inter-year basis negligible (particularly in context of statistical margins of error)

(Source: Sub-regional productivity – local authority - ONS)

Productivity – output gap

GVA in DLEP area is currently £29.20 per hour compared with £33.60 in the UK. This is £4.40 less in DLEP indicating an output gap of £2.5bn compared to the national average.

Productivity - GVA per hour worked and derived output gap (DLEP)



(Source: Sub-regional productivity - LEP - ONS)

- The (derived) output gap in DLEP has widened over time, although on productivity measure (GVA per hour worked) the gap has remained consistent
- Output gap therefore partly driven by relatively more hours worked in DLEP
- Whilst Real GVA (Dorset and Somerset) grew by 9.6% (2010-17), number of hours worked grew by 7.5%
- This 'sticky' output gap not unique to DLEP – regional differentials have not narrowed over time
- Relative improvements difficult to narrow due to dominance of Greater South East's (inc. London) (service-sector) economy
- Absolute productivity fell significantly recessionary period – struggled to recover in subsequent years

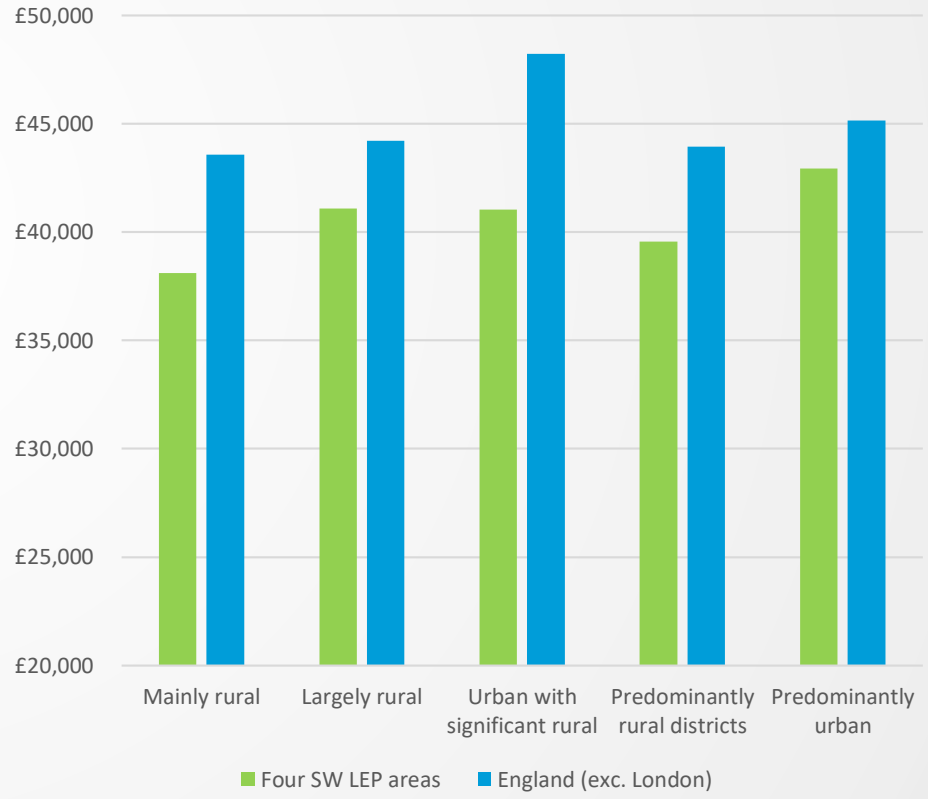
Productivity particularly lagging in more rural areas

Lower productivity more marked in rural Dorset – particularly in more sparsely populated areas and reflecting wider regional trends (remembering it's a workplace measurement)

Productivity - GVA per hour worked – differential against UK average

(Source: Sub-regional productivity – Local Authority - ONS)

Productivity by South West Local Authority rural/urban classification (2015)



(Source: SW Rural Productivity Commission 2017 – evidence base – based on analysis by DEFRA Rural Statistics)

Productivity – what the research says – firm-level productivity

- ONS research outlines two potential sources for differences in aggregate productivity between areas (regions – albeit wider geographic focus than DLEP area):

1) The mix of industries (different industries have different average levels of productivity)
2) Whether firms within its individual industries out-perform their peers in other areas

- ONS research (of non-financial sector) suggests ***"a region's industry structure appears to only play a relatively small role in productivity differences between regions. Instead, it is the differences between firm's productivity within industries which has the most significant effect on aggregate regional productivity differences".***

- If the SW had the same industrial structure as GB whilst maintaining local average firm-level productivity it would equate to 82% of GB average (changing the industrial structure)
- If the SW maintained its regional structure but applied average GB firm-level productivity in each industry, it would equate to 98% of GB average (improving productivity within industrial structure)

(Source: Regional firm-level productivity analysis for non-financial business economy – ONS, Jan 17)

Productivity – what the research says – labour productivity

- ***"It is these differences between London and other regions, in firm-level productivities within individual service sectors, that are responsible for much of the UK's productivity gap."***

- ONS research indicates there are geographical clusters of high-productivity areas, particularly around London and South East
- Between most other areas, productivity differences are relatively small
- Differences in productivity within service sectors of the economy between London and other areas of the country are a particularly important source of productivity differentials
- Internal factors that appear to have a particular influence on a firm's productivity level include whether a firm trades internationally, its management practices, and its ownership; age and size of a firm
- External factors associated with the location of a firm, such as differing local labour markets, existence of agglomeration benefits, and levels of local consumer spending can also affect firm-level productivity

(Source: Understanding spatial labour productivity in the UK – ONS, May 19)

Productivity – what the research says – labour productivity

- For some factors, self-selection is a consideration e.g. higher productivity within exporting firms is primarily due to the most efficient (productive) firms tending to export whilst least productive firms only operate in domestic market
- Similarly, an already highly-productive region is able to attract highly-skilled workers (with greater labour mobility) – rather than skills mix driving productivity per se
- And, more businesses start-up in more productive regions rather than high-productivity of a region being caused by greater levels of entrepreneurial activity

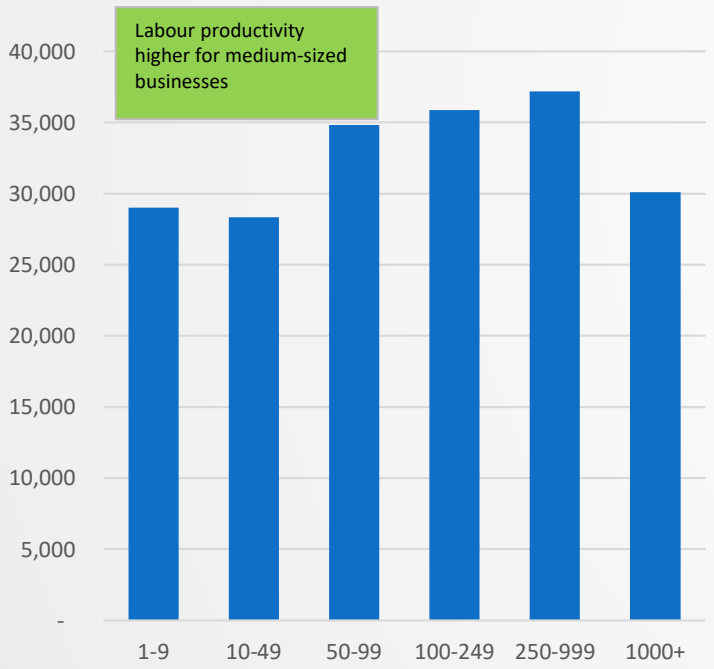
- ***"The ability to influence location factors can be relatively constrained…. However, there may be local improvements that can be made to influence the external factors such as improving transport accessibility and IT infrastructure"***

(Source: Understanding spatial labour productivity in the UK – ONS, May 19)

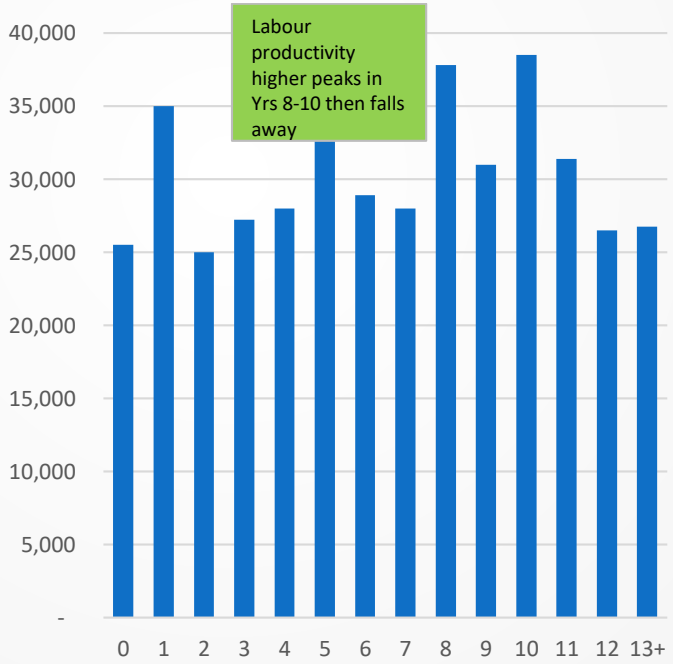
Labour productivity – firm characteristics

Firm-level characteristics of higher labour productivity include size of firm and age – falling off as firms get larger and older

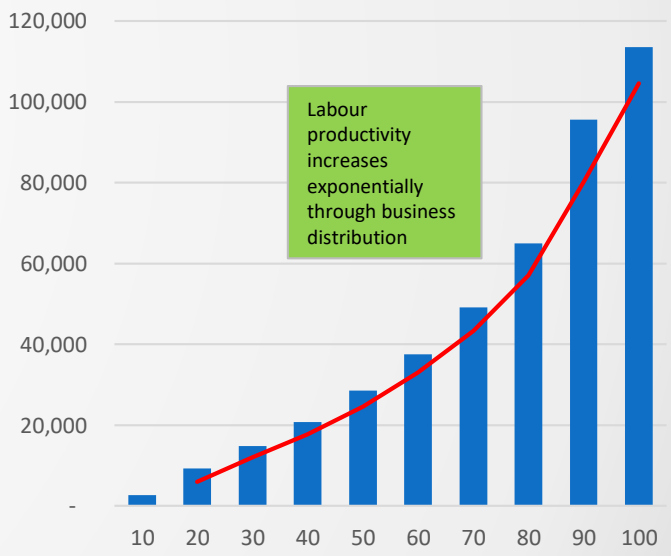
Average (median) labour productivity (£) by employment band (2017)



Average (median) labour productivity (£) by employment band (2017)



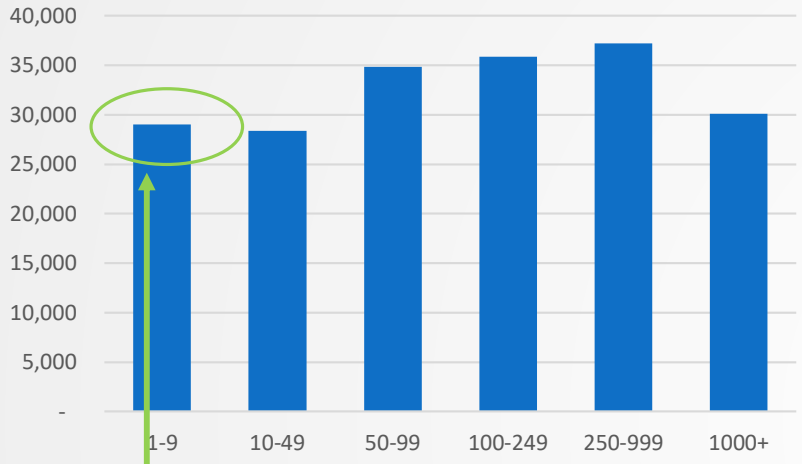
Average labour productivity (£) by percentile (2017)



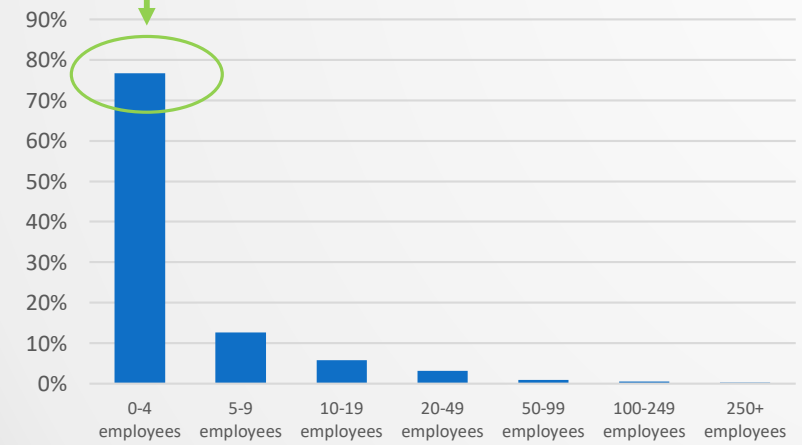
(Source: Firm-level labour productivity estimates - ONS)

Labour productivity – firm characteristics

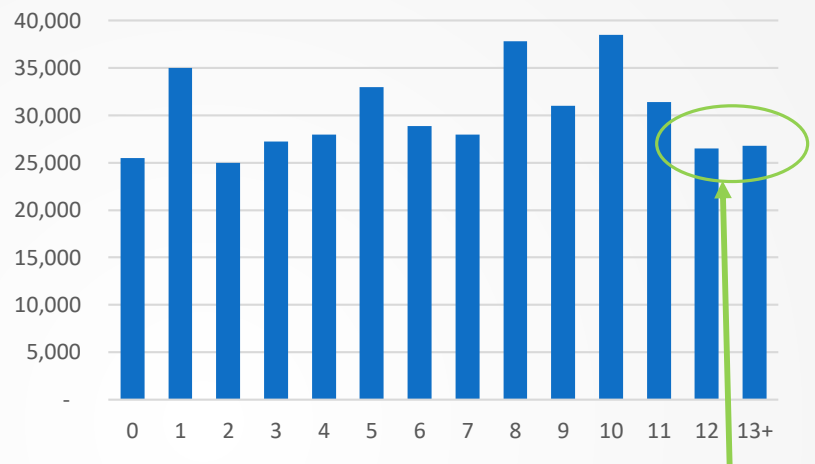
Average (median) labour productivity (£) by employment band (2017)



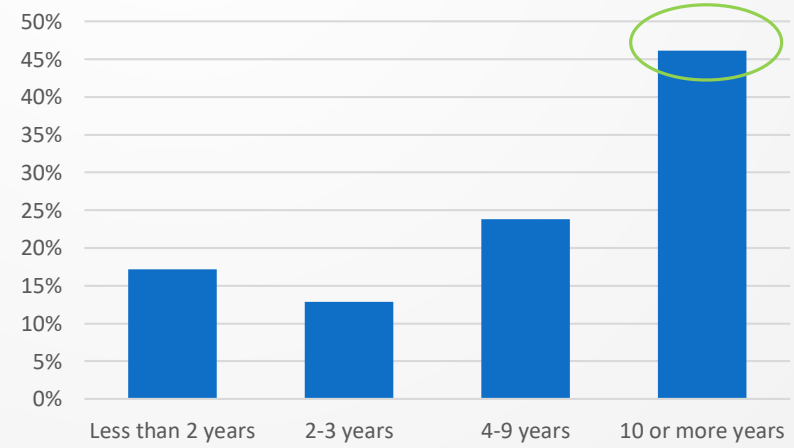
Business in DLEP by employee-band size (2015)



Average (median) labour productivity (£) by employment band (2017)



Business in DLEP by age (2015)



- DLEP has large proportion of micro/small businesses (although not different from national profile)
- As demonstrated, small businesses typically associated with lower productivity (although that may improve quickly)
- Also, has a lot of well-established businesses (although not markedly different than other areas in that respect)
- As demonstrated, productivity tends to fall away 10 years+

(Source: Firm-level labour productivity estimates, business demography (user request) - ONS)

FOUNDATIONS OF PRODUCTIVITY:

PEOPLE AND SKILLS

People and skills: summary

- **Replacement demand of people leaving the workforce over the decade presents a significant issue – particularly marked due to demographic profile in DLEP area**
- High proportion of those projected to leave/retire are relatively well qualified/skill – suggesting an issue of quantity and quality
- Expected to be a bigger driver of labour demand than net expansion of 'new' jobs
- Whilst automation and digitalisation are expected to have an impact on future labour demand – highly uncertain and not expected to be marked (in comparison to elsewhere) for DLEP area in aggregate terms
- However, expected to differ across industries/occupations
- Skill levels (as measured by qualifications) differ across DLEP – particularly in Weymouth & Portland. Recognised from a policy perspective e.g. Western Dorset Skills and Employment Strategy
- Evidence suggests that hard-to-fill vacancies due to skills shortages is more marked in DLEP
- Mixed picture on graduate retention – 1 in 5 stay in University town (Bournemouth) but significant proportion continue to flow to London for work opportunities
- Indications are that IT and related jobs remain in-demand – cross-sector demand for these skills
- Attainment at school level differs across the DLEP area – significant gaps remain between disadvantaged and non-disadvantaged
- Tight labour market conditions presents issues to employers in terms of retaining good staff, particularly in competitive industries such as digital – labour movements are high

People focused policies – what the evidence suggests

- There is evidence that **apprenticeships are more likely to increase employment than other forms of employment training (unless that training also involves an in-firm element). The evidence on wages is more mixed** and appears to vary by gender
- In terms of employment-based policies, **in-firm/on-the-job training programmes tend to outperform classroom-based training programmes. Employer co-design and activities that closely mirror actual jobs appear to be key design elements**

<u>Policy questions from evaluation evidence:</u>

- Involve employers in training: in-firm and on-the-job programmes are more effective
- Where participants forgo income during longer training programmes, they may need additional support
- Short programmes have a positive impact on larger numbers of people, so appear to be better value for money
- There is no difference in success rates between locally delivered or nationally delivered programmes
- The impact of training on employment is modest and should not be oversold

(Source: What Works Centre for Local Economic Growth – evidence review)

Workforce projections – replacement demand

Replacement demand (replacing those who leave the workforce) could contribute 6x as many job opportunities as net job growth over the next decade (2019-2029):

150,000 job openings from retirements and occupational mobility

23,400 ‘new’ jobs created

Overall, looking at net demand:

- 44% of jobs to be filled may require skills at Level 4+ - key policy issue – many of those projected to leave workforce have higher qualification levels
- Just under a fifth may require level 3 skills
- Just under a fifth may require level 2 skills
- Just under a fifth may require skills at level 1 or under

(Source: Dorset Council Local Economic Forecasting Model – Cambridge Econometrics)

Workforce projections – replacement demand

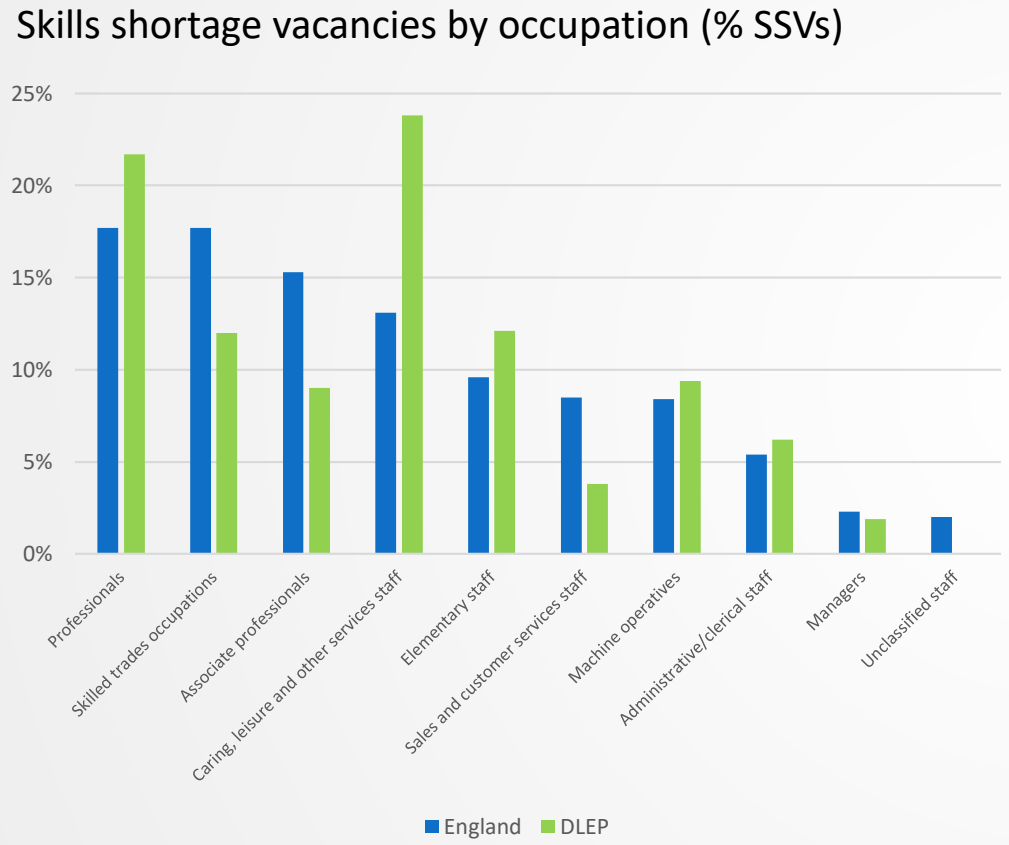
Sector demand breakdown – expected trends:

Occupation	Projected expansion demand	Projected replacement demand
Associate professionals	↑	↑
Professionals	↓	↑
Skilled crafts	↑	↑
Caring/personal/leisure services	↑	↑
Administrative/secretarial	↓	↑
Process/plant operatives	↓	↑
Sales/customer service	↑	↓
Elementary occupations	↑	↓

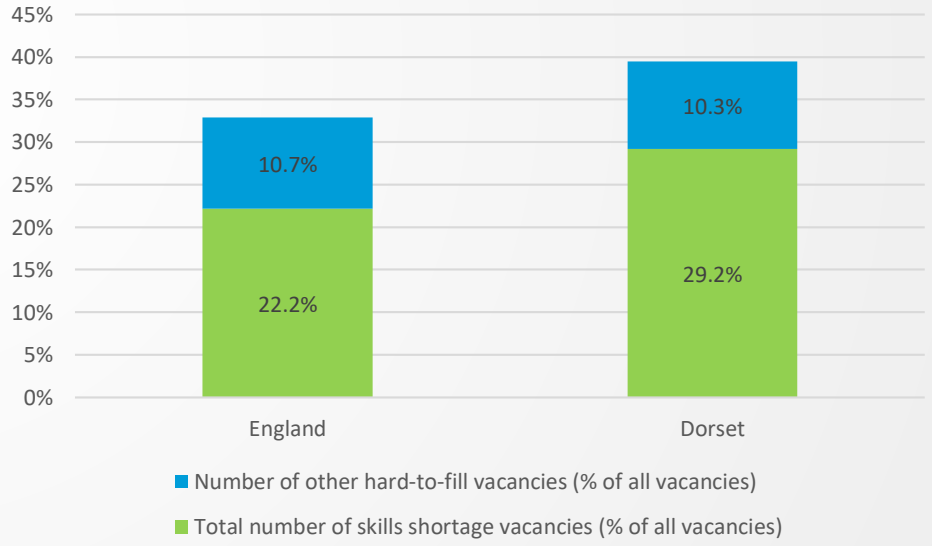
(Source: Dorset Council Local Economic Forecasting Model – Cambridge Econometrics)

- Biggest projected demand for replacement labour in professional occupations (due to demographic profile)
- Negative expansion demand expected in some occupations due to increasing automation e.g. administration and/or process operatives

Significant skills shortages in some sectors within DLEP



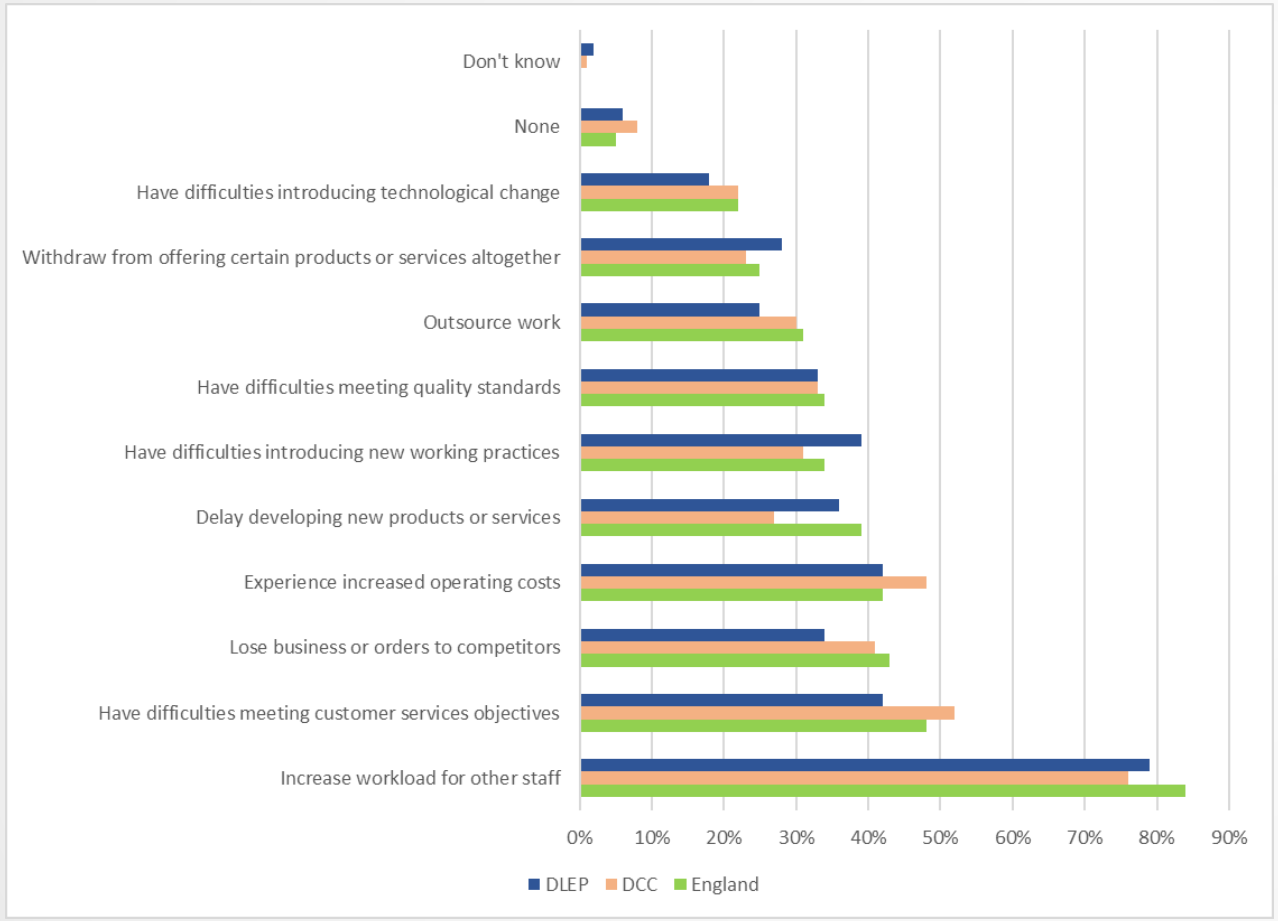
- Density of skills gaps (no: of staff not fully proficient in own jobs) in DLEP 5.5%, compared to 4.4% in England
- Proportion of skills shortage vacancies higher than national average
- Significant skills shortages in some occupations e.g. care sector*



(Source: Employers Skills Survey 2017 - * survey data so associated with margins of error at DLEP level)

Commercial impact of skills shortages

Impact of Skills shortage vacancies (% of firms with SSVs)

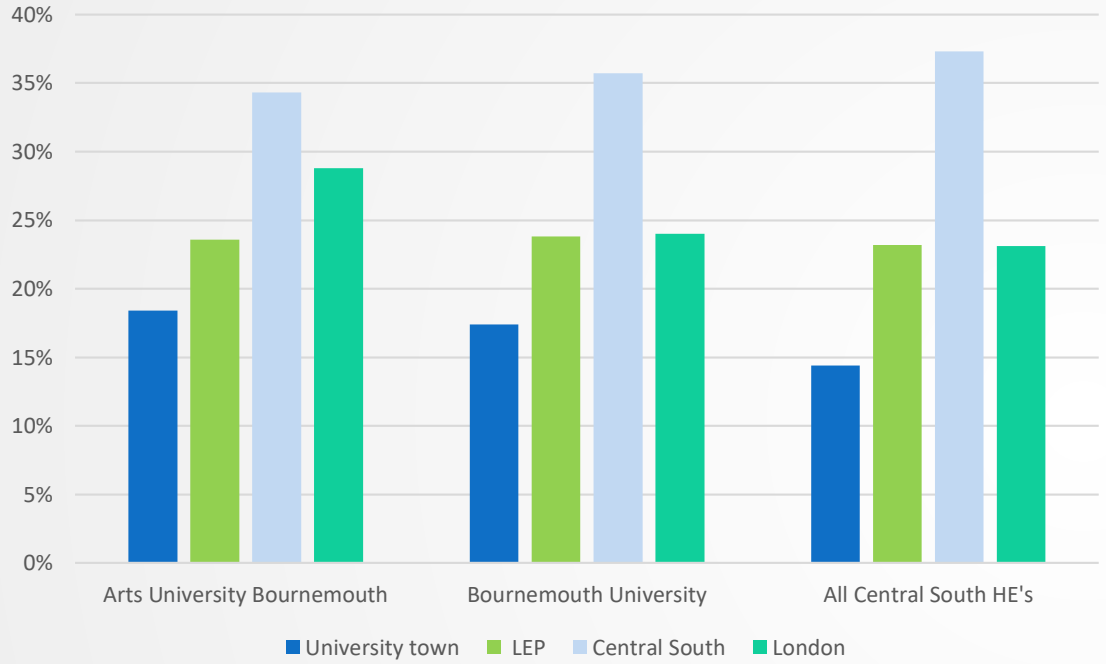


- 40% of business experiencing skills shortages cannot meet customer orders
- 40% of businesses also state that skills shortages mean they cannot develop new products and services as needed – illustrating the link between skill shortages and innovation
- Similarly, 1-in-5 felt that skills shortages made it difficult to introduce technological change to their business (links with innovation)
- Many facets how skills shortages affect competitiveness and productivity of businesses

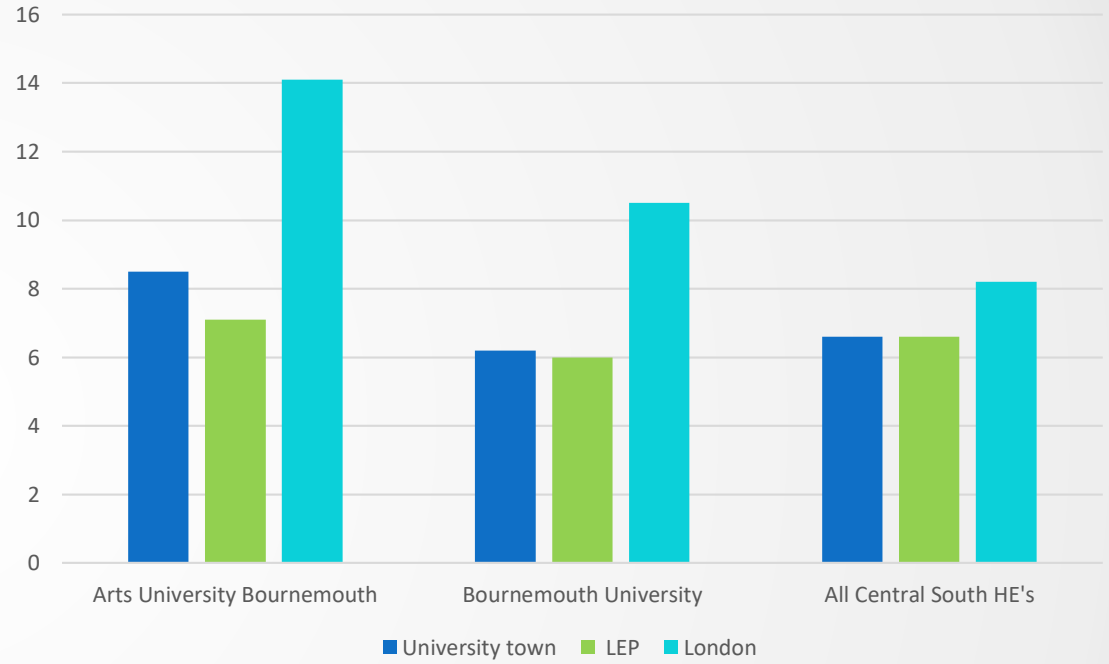
(Source: Employers Skills Survey 2017)

DLEP area experiences a net gain of graduates……

Destination of graduates (% 2016/17 graduates)



Net Gain (% graduates working in area minus residence)

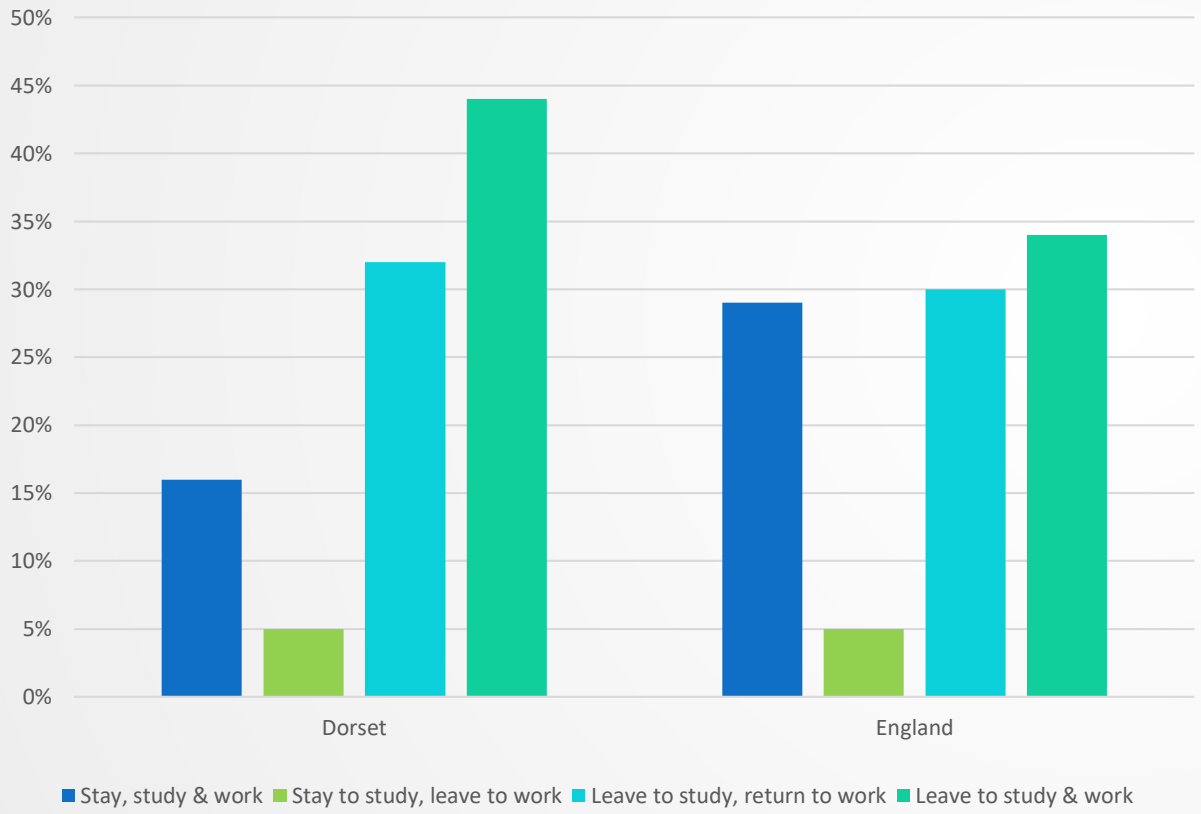


(Source: Southern Policy Centre – Home, here or London – retaining graduates)
* Central South defined as Dorset, Enterprise M3 and Solent LEP areas

- Just under 1 in 5 graduates stay in Bournemouth, with 1 in 4 staying in LEP area – relative success
- However, 1 in 4 still also move to London – data from elsewhere suggests that some larger cities e.g. Bristol, Manchester etc. are able to retain a greater proportion of graduates (although most areas experience this net loss in the short-term)

But performs marginally worse than average

Study/work destination of those living in LEP (% by LEP of domicile)

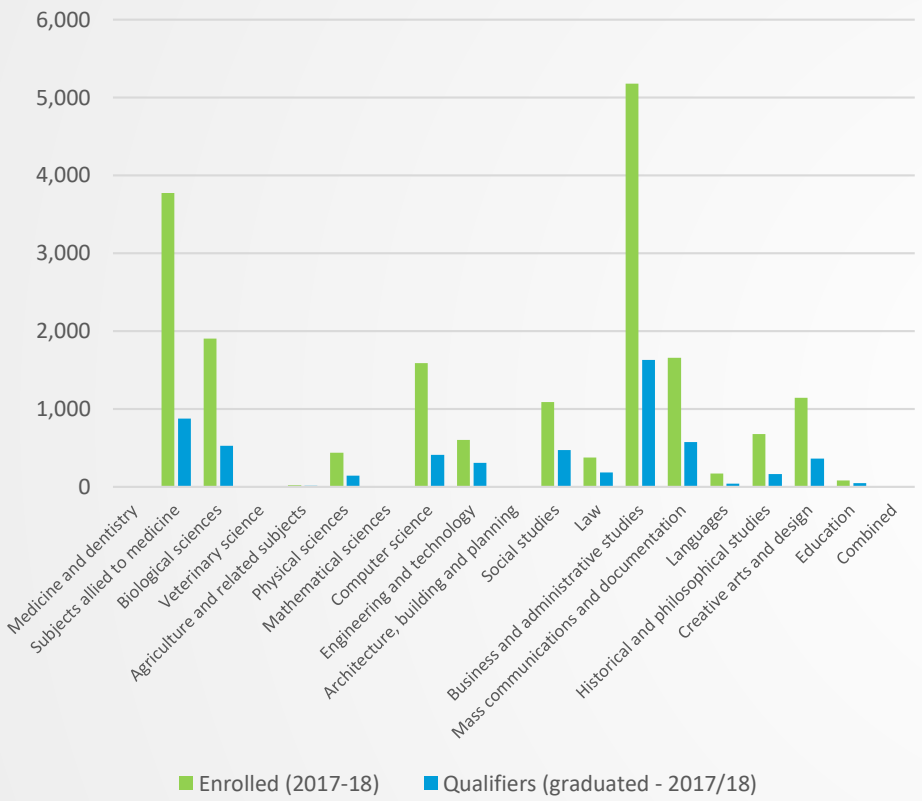


(Source: Southern Policy Centre – Home, here or London – retaining graduates)
* Central South defined as Dorset, Enterprise M3 and Solent LEP areas

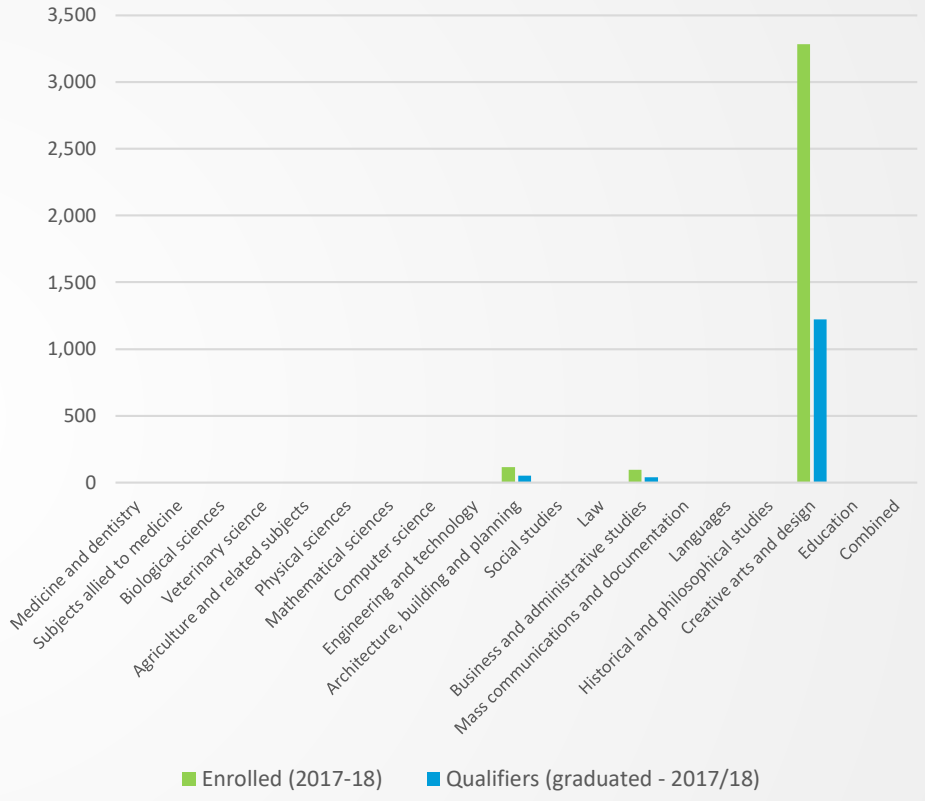
- Partly due to provision of HE places? One place for every 56.3 people in DLEP area (21.2 in Bath/Bristol, or 26.0 in Solent)
- But also ability of local economy to absorb graduates, reflective of graduate's particular skills e.g. digital?
- Local HE's view engagement with local economy as important but obviously dependent on the absorptive capacity of the local economy e.g. enough quality opportunities for graduates
- HE's have strongly developing links with local employers – course curriculum often co-designed alongside industry with the aim of developing 'industry ready' graduates

HE students by subject area

Bournemouth University – students by broad subject type (2017/18)



Arts University Bournemouth – students by broad subject type (2017/18)



- Heavy specialism in creative arts and design at the Arts University Bournemouth
- Specialisms at Bournemouth University include subjects allied to medicine, computer science and business studies

(Source: Higher Education Statistics Agency)

Pupil attainment

GCSE and equivalent results (2016/17)

	Average attainment 8 score per pupil*	Percentage of pupils who achieved a strong 9-5 score^	Percentage of pupils who achieved a standard 9-5 score^	Average progress 8 score>	Percentage of schools assessed as below the floor standard+
England	44.6%	39.6%	59.1%	-	12%
Bournemouth	48.0%	47.8%	68.3%	-0.03	18%
Dorset	54.2%	39.6%	63.4%	-0.15	18%
Poole	51.5%	54.0%	72.9%	0.2	0%

(Source: GCSE and equivalent results in England 2016/17)

* Attainment 8 and Progress 8 are part of the new secondary accountability system that was implemented for all schools from 2016 – only include State-funded secondary schools

^ As a percentage of pupils at the end of Key Stage 4

> A Progress 8 score of 1.0 means pupils in the group make on average a grade more progress than the national average, a score of -0.5 means they make on average approx. half a grade less progress than average

+ A school or college is below the secondary floor standard if its Progress 8 score is below -0.5

Pupil attainment

Gap in months (attainment) between disadvantaged^ and non-disadvantaged pupils

	Early Years	Primary Schools	Secondary Schools
England	4.3	9.4	18.4
Bournemouth	2	9	19
Dorset	5	11	23
Poole	3	12	16

Change in gap since 2012 – comparison with local authorities with similar 2012 gap

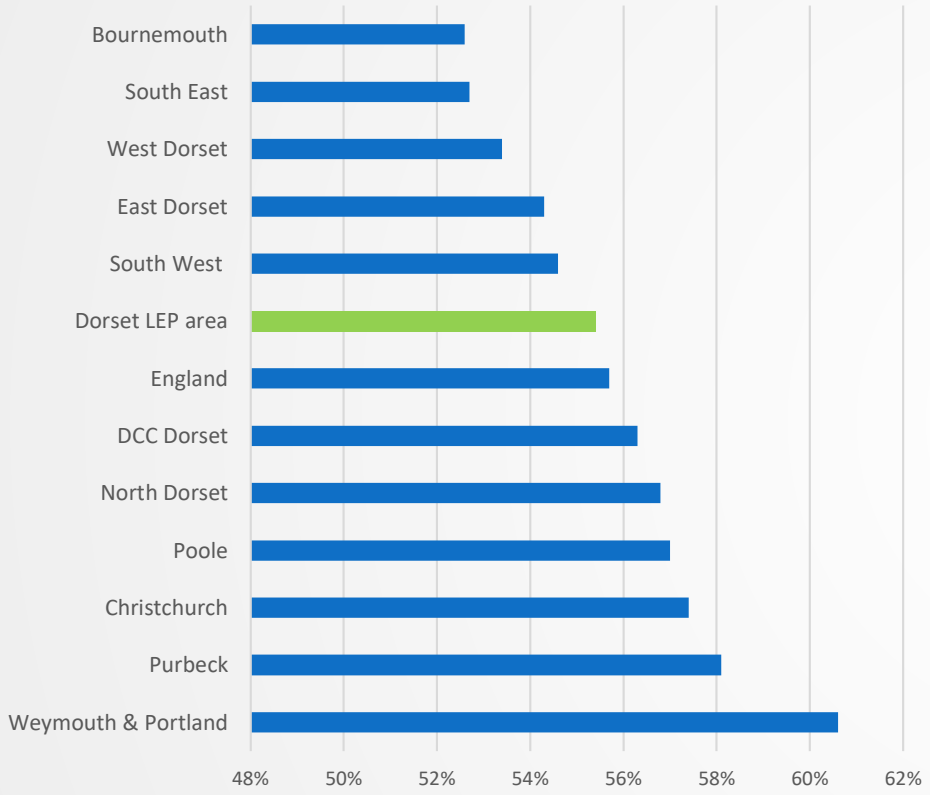
	Early Years	Primary Schools	Secondary Schools
England	-0.2*	-0.7	-1.6
Bournemouth	-0.5	-0.6	-2.6
Dorset	1.2	0.5	4.1
Poole	-0.7	2.0	-3.3

- At a national level at around half of schools disadvantaged pupils are typically at least 0.5 grades between their peers
- Gap in attainment between disadvantaged and non-disadvantaged pupils particularly marked in Dorset at secondary level
- However, gap has significantly closed over the past 5 years
- Secondary attainment gap narrower in Poole

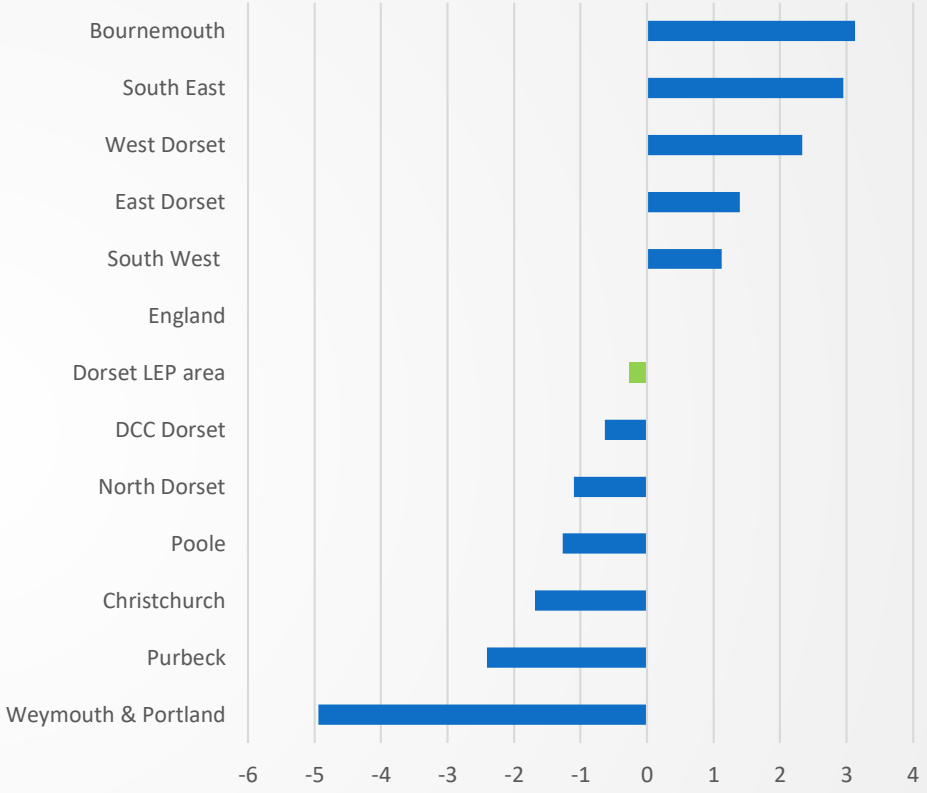
(Source: Analysis of National Pupil Database – Education Policy Institute
* Since 2013 ^ Defined as those pupils where schools are in receipt of pupil premium)

Lower skills base in some areas results in heightened 'skills risk'

% people with low skill levels (Level 2 or below) (skills risk)



Skills risk – distance from national average (percentage point)

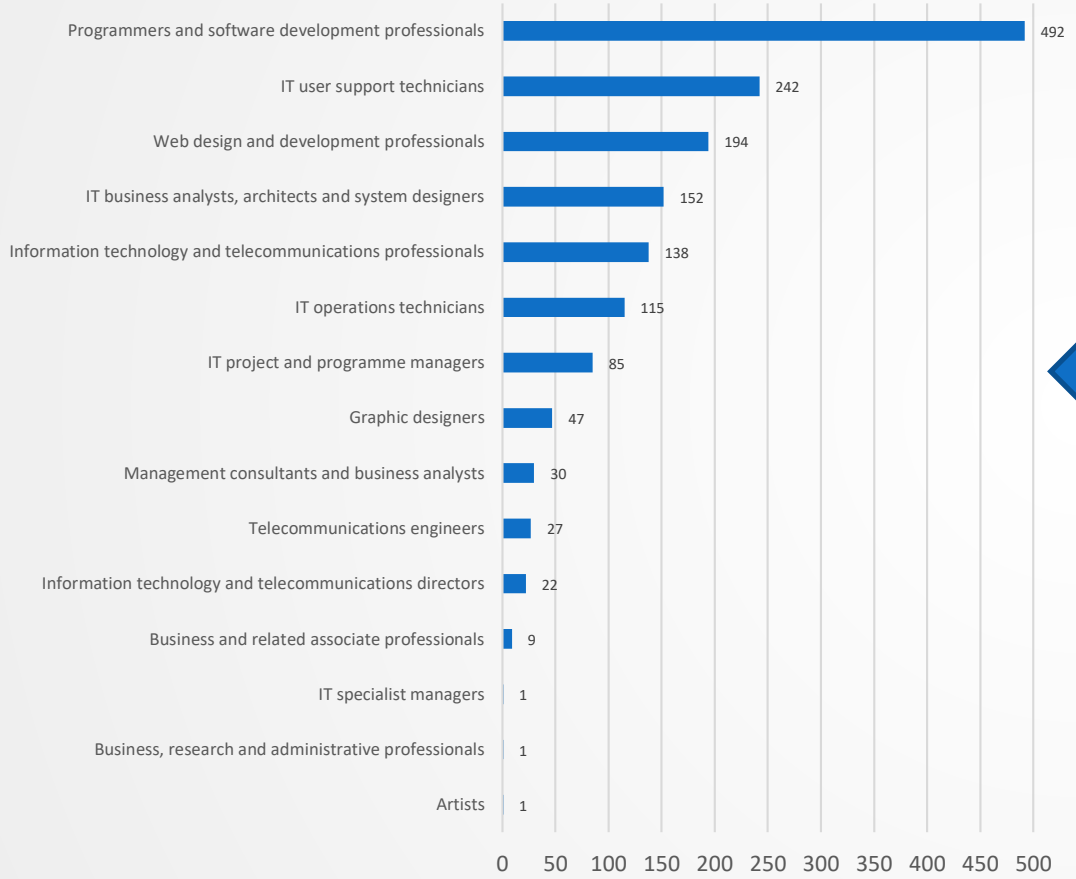


- Skills (qualification) profile differs across the area – Weymouth & Portland notable for lower skills base
- Skills base seen as a 'risk' in terms of current/future competitiveness – although only one variable in future competitiveness
- Recognise that qualifications are not necessarily 'perfect' indicator of skills – proxy for skills base

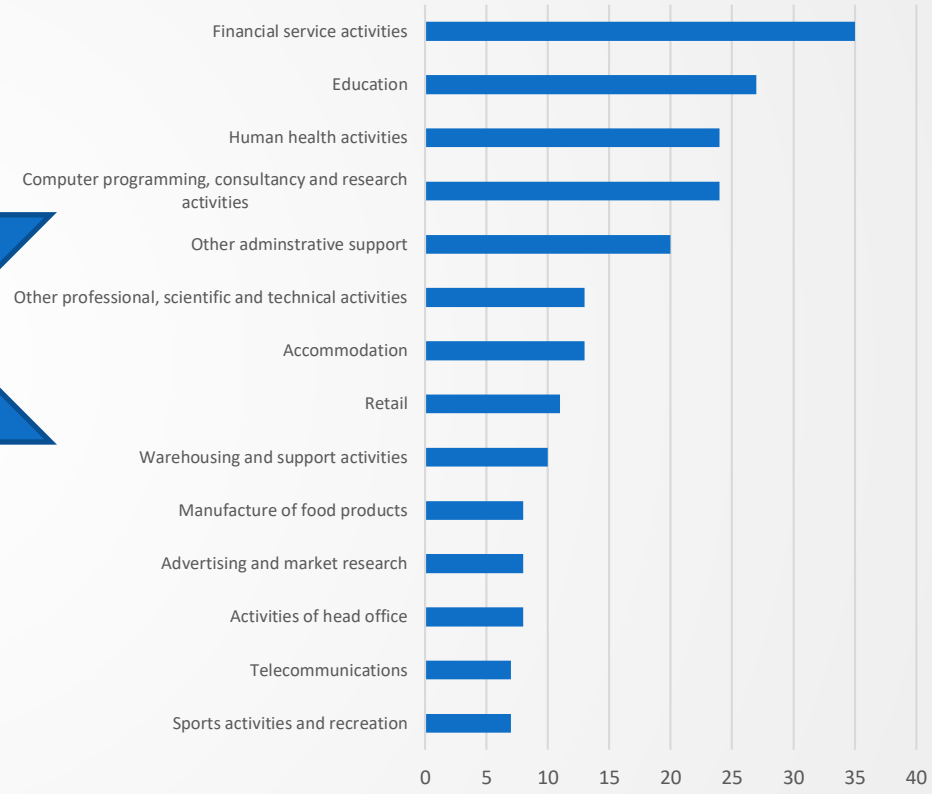
(Source: Localis/Dorset Council analysis)

IT skills in heavy demand – across sectors

Jobs by demand – occupations (number of advertised vacancies)

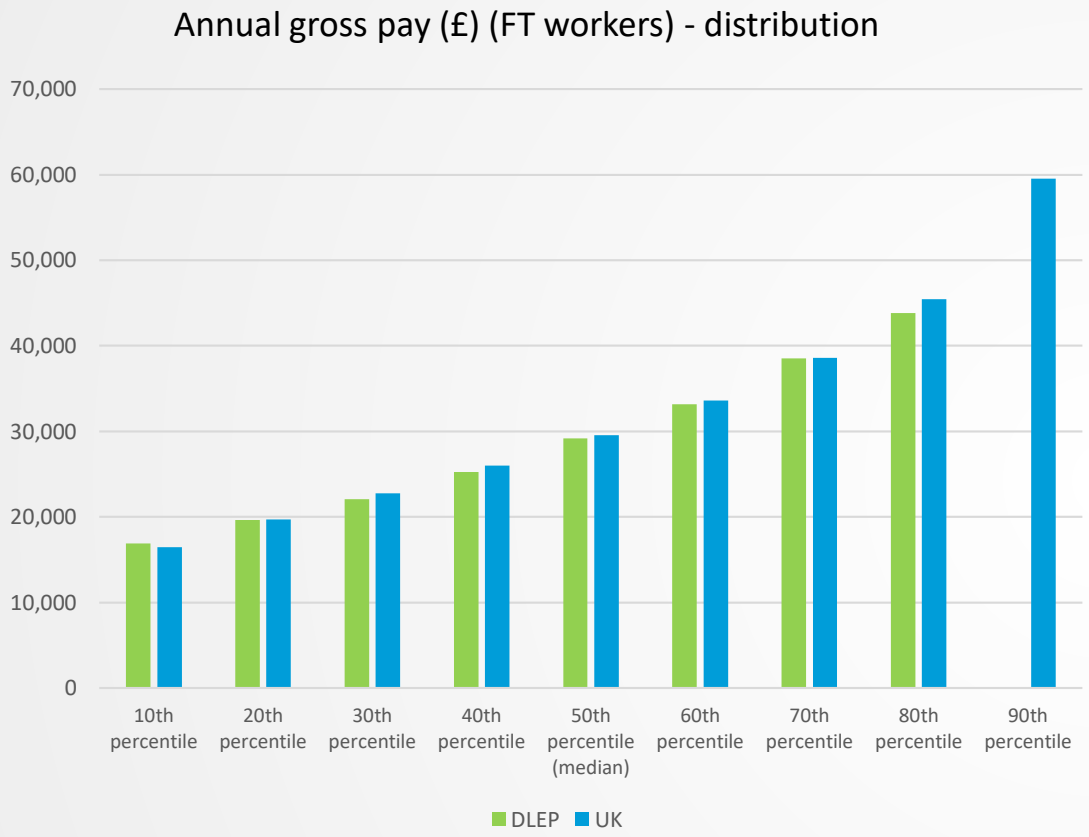


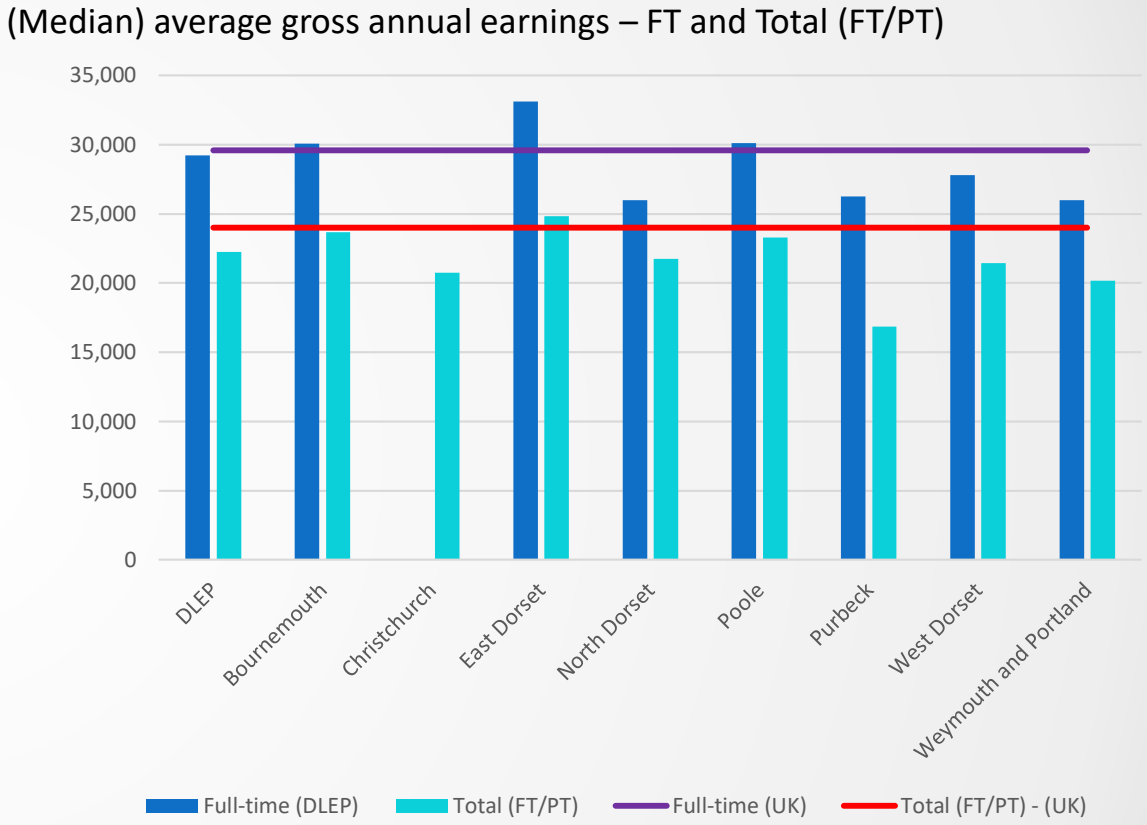
Hiring industries – IT or IT-related jobs



(Source: Labour Insight Jobs (Burning Glass Technologies) – November 18)

Earnings – levels and profile similar to national average





- Earnings distribution in DLEP similar to that seen in UK
- Some areas (East Dorset) exceed national average annual pay
- Other areas (Purbeck, North Dorset, Weymouth & Portland) below national average

(Source: Annual Survey Hours and Earnings (ASHE) - ONS)

Key questions in development of LIS evidence – people and skills

- Skills (as measured by qualifications) differ across different parts of the DLEP area
- At a high-level the evidence suggests that employers suffer from skills shortage and ability to recruit into technical roles
- The loss of skills from those leaving the labour market is expected to be marked in DLEP – replacement demand from employers expected to be significant in absolute and relative terms
- There are gaps in the understanding of the skills requirements from employers and how they match onto the provision by providers, although FE/HE does already work closely with employers. The work supporting the Skills Advisory Panels is expected to provide a greater understanding – continuing to feed into the development of the LIS
- Skills action plans have been developed to reflect the specific skills requirements/objectives within DLEP e.g. 'Western Dorset Growth Corridor – An Action Plan for Employment and Skills' and 'Bournemouth, Dorset and Poole skills and labour market analysis'
- The modelling of exogenous shocks such as further automation and digitalisation suggests that in overall terms is 'exposed' similar to other areas. However, the impacts may play out differently across the area

FOUNDATIONS OF PRODUCTIVITY:

IDEAS AND INNOVATION

Ideas and innovation: summary

- Evidence suggests that **aggregate** levels of innovation within DLEP are lower than national comparators/benchmarks – although innovation activity could be judged broadly as 'mid-range'
- There tends to be less spent and fewer people employed on R&D activities in DLEP businesses
- Indications from innovation surveys is that approx. 1 in 5 DLEP businesses engage in any form of R&D activity – there is a 'long tail' of businesses who are not active
- R&D activity likely to be driven by significant larger businesses in the area involved in specific sectors e.g. defence, aerospace, marine etc.
- Data suggests that in aggregate terms the local universities are not necessarily innovation/R&D intensive – certainly against comparators such as 'Russell Group'. However, comparable against broadly 'similar' universities
- However, there are **clear specialisms** within the universities which are not necessarily reflected in aggregate terms – and these have close match to Industrial Strategy Grand Challenges
- Challenge is to develop strong local linkages whilst at the same time keeping the national/international focus of key of the universities

Innovation focused policies – what the evidence suggests

- R&D grants, loans and subsidies can raise innovation activity in recipients, although effects are not always positive. **The effects differ across types of innovation, and are weaker for patents than for (self-reported) measures of process or product innovation**
- Financial support can positively impact productivity, employment or firm performance. **There is some evidence that support is more likely to increase employment than productivity**
- **Programmes that emphasise collaboration perform better than those that just support private firms.** Encouraging collaboration might have an additional positive effect on the likelihood that an R&D support programme generates positive effects on outcomes of interest
- Programmes that target particular production sectors appear to do slightly worse in terms of increasing R&D expenditure and innovation, compared to those that are 'sector neutral'

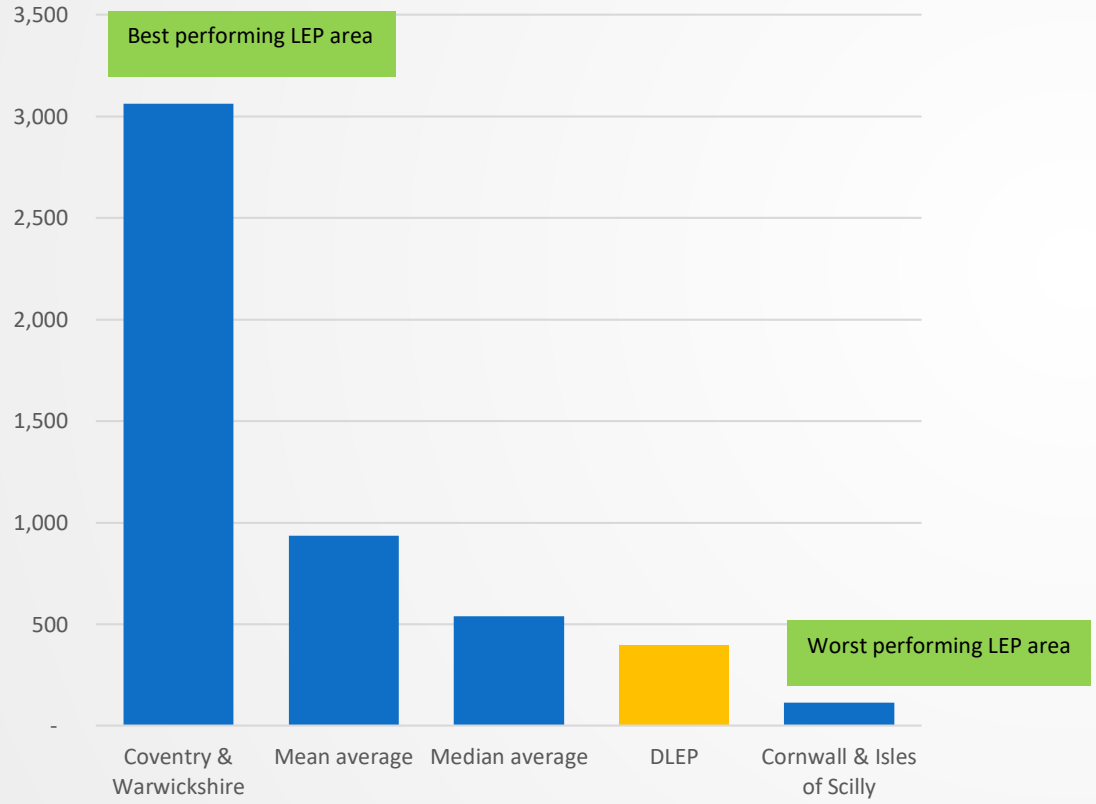
<u>Policy questions from evaluation evidence:</u>

- **The evidence urges caution on the role that more localised innovation policy could play in driving local economic growth** – there is mixed evidence about whether or how increased R&D activity feeds through to greater innovation, better firm performance or longer term economic growth, particularly at the local level
- The evidence is inconclusive about the extent to which public support crowds out private investment

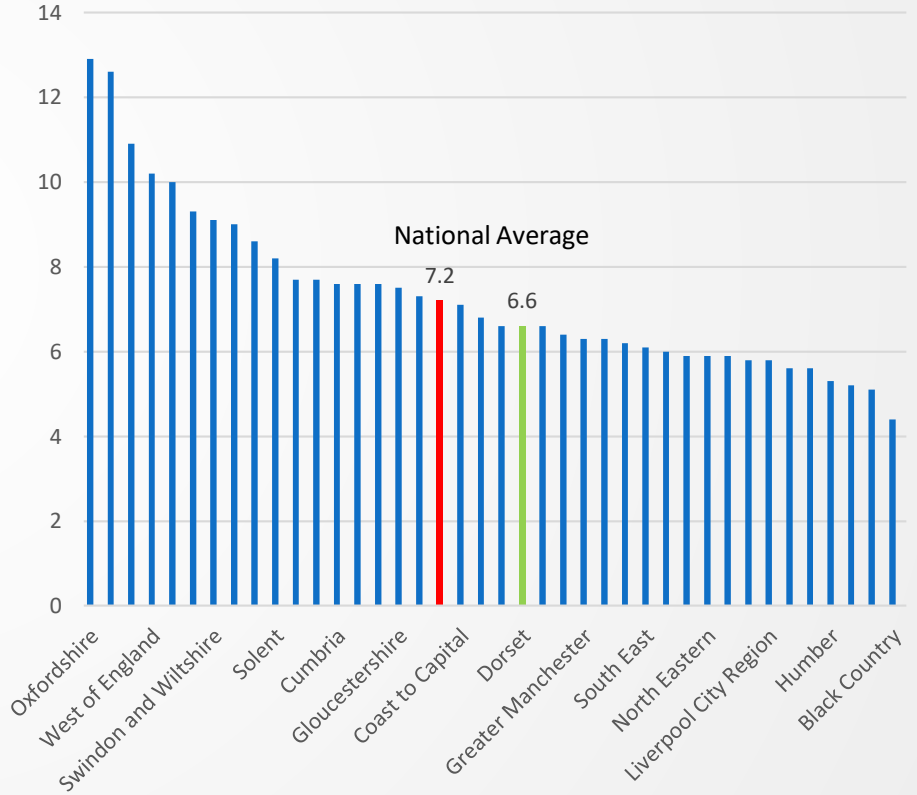
(Source: What Works Centre for Local Economic Growth – evidence review)

R&D spending by business is below average and fewer engaged in R&D related activities

Business enterprise R&D expenditure (BERD) by LEP (£ per person employed)

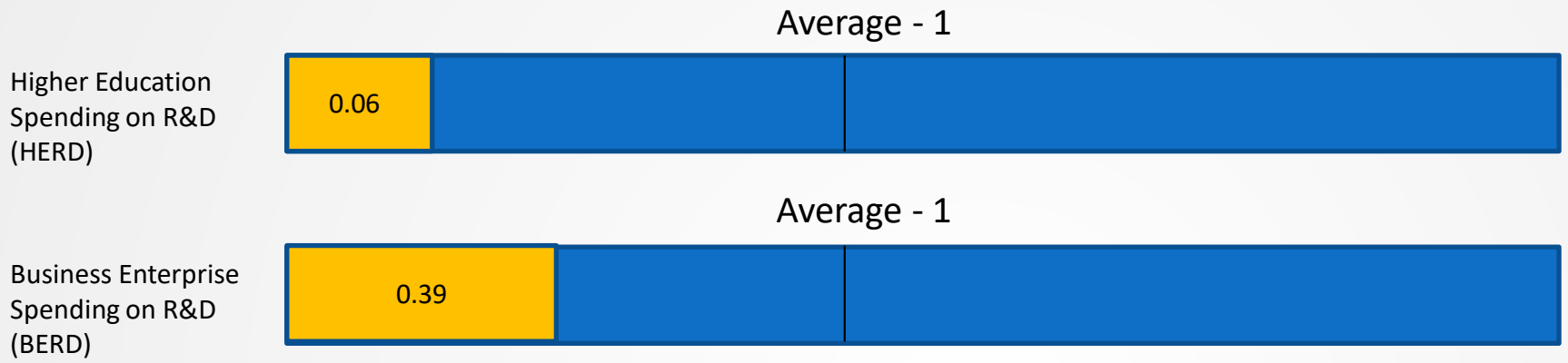


R&D employment by LEP (% in employment who are in 'science, research, engineering and technology professions and associated professions

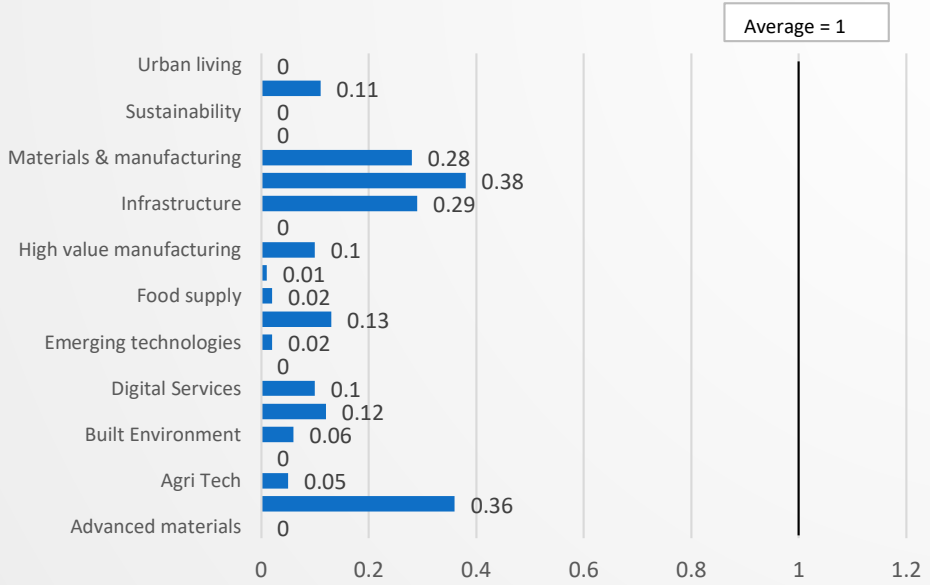


(Source: Mapping Local Comparative Advantages in Innovation, BIS 2015)

Ideas and innovation – measures suggest lower R&D spend



Grants offered by Innovate UK (March 2014 – March 2018)



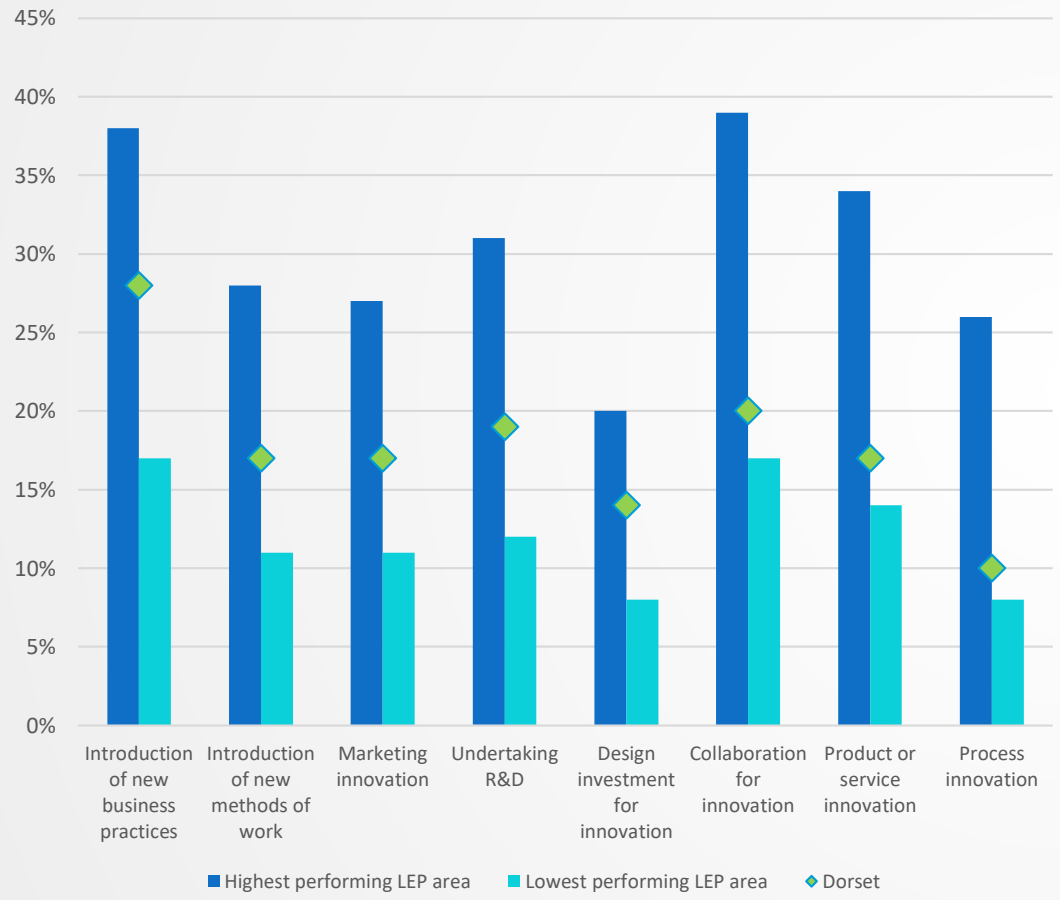
- On most measurements of innovation spend, the DLEP area lags the average LEP
- The relative weakness at an aggregate level in HE sector highlighted
- DLEP area has been less successful in drawing in Innovate UK grant support - reflective of demand?

- Overall, suggests that the area is not meeting the national target of 2.4% R&D spend (as proportion of output)

(Source: Smart Specialisation Hub – Dorset Profile)

DLEP tends to have fewer innovation-active firms

% firms introducing innovation practices (3 year period 2012-14)

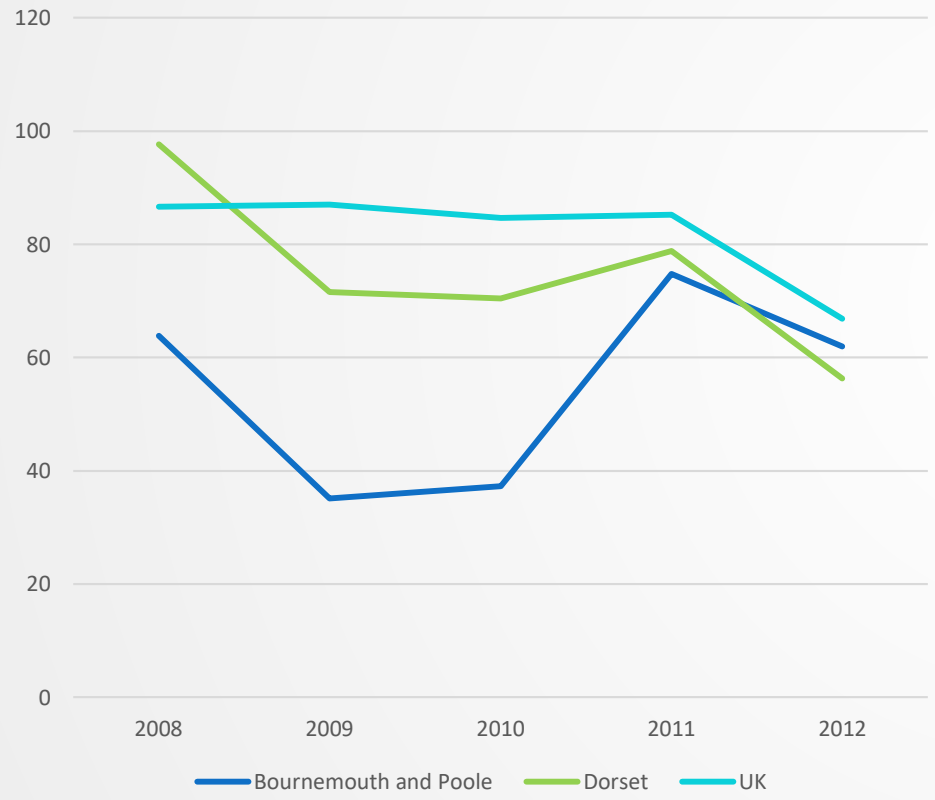


- On most measures of firm-level innovation the DLEP area tends to perform 'average' or just 'below average'
- Just under 20% of businesses (surveyed) undertook R&D activity in preceding 3 years
- Similar amount have collaborated with another organisation to stimulate innovation in their business
- Suggests that DLEP businesses may be more innovation active than 'hard measurements' suggest – although remaining broadly average in scale of activity

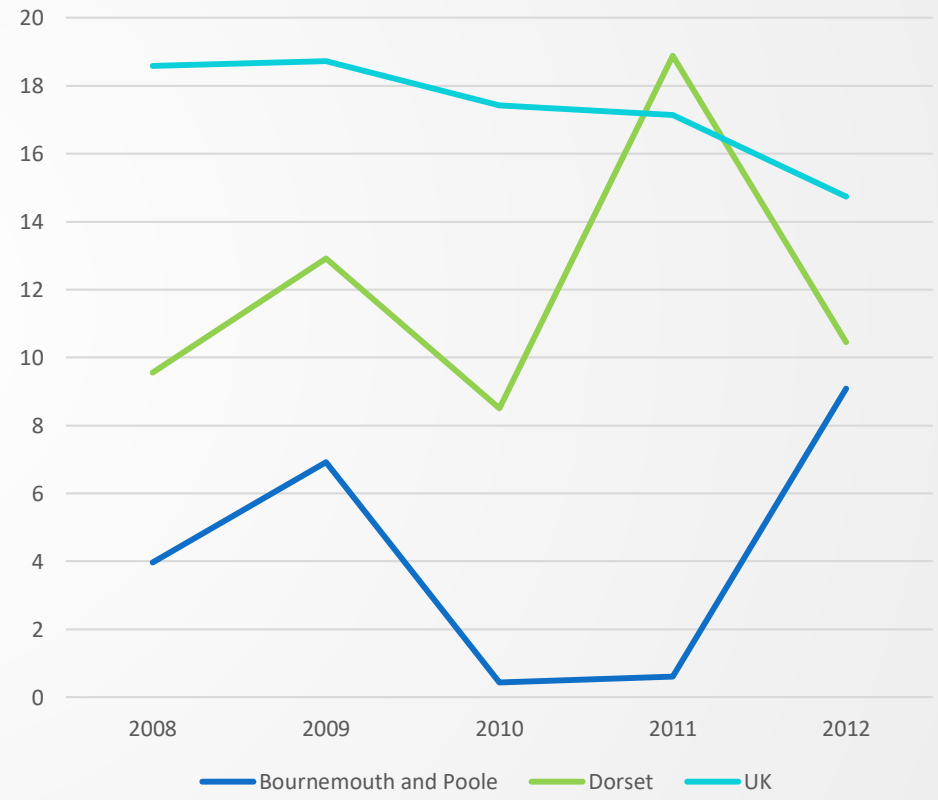
(Source: Benchmarking local innovation – the innovation geography of England – ERC Research report 2017 – based on UK Innovation Survey)

Patent applications – (lagged) data showing signs of convergence?

Number of patent applications (per million residents)



Number of hi-tech patent applications (per million residents)



(Source: Eurostat)

HE driven innovation appears weaker against nearby comparators

Number of active spin-offs (2014/15 to 2017/18)

	Spin-offs with some HEP ownership	Formal spin-offs, not HEP owned	Staff start-ups	Graduate start-ups	Social enterprises
Bournemouth University	1	2	0	3	0
The Arts University Bournemouth	0	0	0	0	0
Falmouth University	4	0	0	197	0
The University of Brighton	0	0	0	16	0
The University of Portsmouth	0	0	0	34	0
University of Plymouth	3	0	0	24	2
The University of Southampton	1	1	3	13	2

Estimated turnover of active spin-offs (2014/15 to 2017/18) (£ thousands)

	Spin-offs with some HEP ownership	Formal spin-offs, not HEP owned	Staff start-ups	Graduate start-ups	Social enterprises
Bournemouth University	512	2,000	0	512	0
The Arts University Bournemouth	0	0	0	0	0
Falmouth University	203	0	10	0	100
The University of Brighton	0	0	198	407	0
The University of Portsmouth	0	0	0	15,600	0
University of Plymouth	15,000	0	80	6,000	89
The University of Southampton	22,652	79,035	17,277	21,631	106

(Source: Higher Education Statistics Agency)

HE driven innovation appears weaker against nearby comparators

Estimated external investment received (2014/15 to 2017/18) (£ thousands)

	Spin-offs with some HEP ownership	Formal spin-offs, not HEP owned	Staff start-ups	Graduate start-ups	Social enterprises
Bournemouth University	0	0	0	0	0
The Arts University Bournemouth	0	0	0	0	0
Falmouth University	17	0	0	0	0
The University of Brighton	0	0	0	8	0
The University of Portsmouth	0	0	0	0	0
University of Plymouth	300	0	20	32	0
The University of Southampton	15,419	1,631	0	200	0

Number of patent disclosures (2017/18)

	Disclosures	No: of patent applications filed in the years	No: of patents granted in the year	Cumulative patent portfolio	Number of patents filed by an external party naming the HEP as an inventor
Bournemouth University	66	10	0	13	1
The Arts University Bournemouth	0	0	0	0	0
Falmouth University	0	1	1	1	0
The University of Brighton	2	0	0	21	47
The University of Portsmouth	4	4	0	2	3
University of Plymouth	35	11	16	70	1
The University of Southampton	62	42	55	356	9

(Source: Higher Education Statistics Agency)

HE driven innovation appears weaker against nearby comparators

Commercial income (2017/18) (£ thousands)

	SMEs		Other (non SMEs) commercial		Non-commercial organisations	
	Number	Value (£000s)	Number	Value (£000s)	Number	Value (£000s)
Bournemouth University	31	101	21	215	123	826
The Arts University Bournemouth	0	0	0	0	0	0
Falmouth University	0	0	0	0	0	0
The University of Brighton	4	221	15	318	36	1,243
The University of Portsmouth	4	32	52	1,242	74	1,069
University of Plymouth	6	86	6	98	18	1,225
The University of Southampton	54	2,761	216	8,832	709	19,824

Collaborative research income (2017/18) (£ thousands)

	Public funding	Collaborative contribution – cash	Collaborative contribution – in kind	Total	Previous year's total
Bournemouth University	1,634	145	62	1,841	1,286
The Arts University Bournemouth	0	0	0	0	0
Falmouth University	149	280	446	875	565
The University of Brighton	2,260	218	254	2,732	2,624
The University of Portsmouth	1,811	157	177	2,145	1,658
University of Plymouth	1,173	76	159	1,408	1,281
The University of Southampton	34,462	307	2,882	37,651	33,327

(Source: Higher Education Statistics Agency)

HE driven innovation appears weaker against nearby comparators

Innovate UK projects by research institution

	Number of projects	Lead participant	Rank (out of 161 institutions)
Bournemouth University	16	15	87th
The Arts University Bournemouth	0	0	N/A
Falmouth University	4	1	125th
The University of Brighton	58	38	35th
The University of Portsmouth	53	32	40th
University of Plymouth	48	26	44th
The University of Southampton	186	44	8th

Innovate UK project value by research institution

	Project Value	Rank (out of 161 institutions)
Bournemouth University	£1.5mn	91st
The Arts University Bournemouth	0	N/A
Falmouth University	£0.1mn	147th
The University of Brighton	£6.9mn	38th
The University of Portsmouth	£5.4mn	47th
University of Plymouth	£4.5mn	58th
The University of Southampton	£39.2m	11th

(Source: Beahurst)

- In aggregate terms, the level of HE driven innovation reflects size and orientation of universities – marginally lower on some measurements against comparators
- The data for University of Southampton shows the scale of innovation-related activity that tends to happen in Russell Group institution
- Relatively lower levels of HE related research, commercial income and/or grants flowing into DLEP area

However, close alignment with Industrial Strategy priorities

- University of Bournemouth has identified four key strategic areas in its Strategic Plan (to 2025) which align closely to the Industrial Strategy:

➢ Assistive Technology (exploring how technology can support physical and mental health in research areas such as robotics, data analytics and cognitive modelling)

➢ Animation, Simulation and Visualisation (building on strengths such as the National Centre for Computer Animation and including research areas such as augmented reality, games and film technology))

➢ Medical Science (building on strengths such as the Institute of Medical Imaging & Visualisation and including research areas such as AI, bioengineering and digitalisation and personalisation of health and medical products)

➢ Sustainability, Low Carbon Technology and Materials Science (including energy science, low-carbon technology and energy network development)

Key questions in development of LIS evidence – ideas and innovation

- Data at an aggregate level suggests that promoting greater levels of innovation and RD&I activity in DLEP – suggesting that it is not at the 'aspirational' national target of 2.4%
- At a national level, the UK indications are that the UK is not meeting this target
- Spreading innovative activity to the 'long tail' of businesses who do not innovate (in process or product/service terms) could act as a key driver for improved productivity
- The aggregate evidence does not fully reflect the specialisms held in the area. For example, R&D activity in some of the key businesses and specialisms developed in the universities (this is highlighted elsewhere in the evidence pack)
- Linking these specialisms to the wider business community – allowing them to develop solutions to grand societal challenges such as ageing society and/or clean growth – could be key
- How can the significant local ambition of improved digital (e.g. full fibre, mmWave 5G) connectivity drive productivity across important sectors such as advanced manufacturing and creative
- The evidence suggests partners in the DLEP area could focus on ensuring that it gets it share of R&D/innovation support – either in terms of grant or investment support. The majority of this continues to flow to the GSE or significant HE institutions elsewhere

FOUNDATIONS OF PRODUCTIVITY:

INFRASTRUCTURE

Infrastructure: summary

- Different demands (level and type) for employment space provision – again, largely focused around urban region
- Inter-regional and intra-regional transport connectivity identified as a major issue
- Congestion in the urban area also identified as significant issue and potential constraint on growth
- Key strategic set of transport/digital infrastructure improvements identified by local partners
- Increasing agenda around ‘smart city’ and the benefits potentially provided by leading 5G capability
- Housing affordability is a significant issue in the DLEP area – with affordability worsening over time and heightened in certain areas (amongst the highest in the country outside London). Affordability is poor for both ‘average’ and ‘lower’ earners
- Evidence shows that housing development is not meeting targets as identified in Local Plans in most areas – particularly in the urban area. Largely driven by developer behaviour/delivery – is the right housing mix being developed? However, link between increased supply of housing and affordability is unclear
- Infrastructure development takes place in context of high environmental quality
- Green infrastructure plays an important role, as well as providing wider health/wellbeing benefits
- Cross local authority discussions at an early stage about spatial delivery of future housing

Infrastructure focused policies – what the evidence suggests

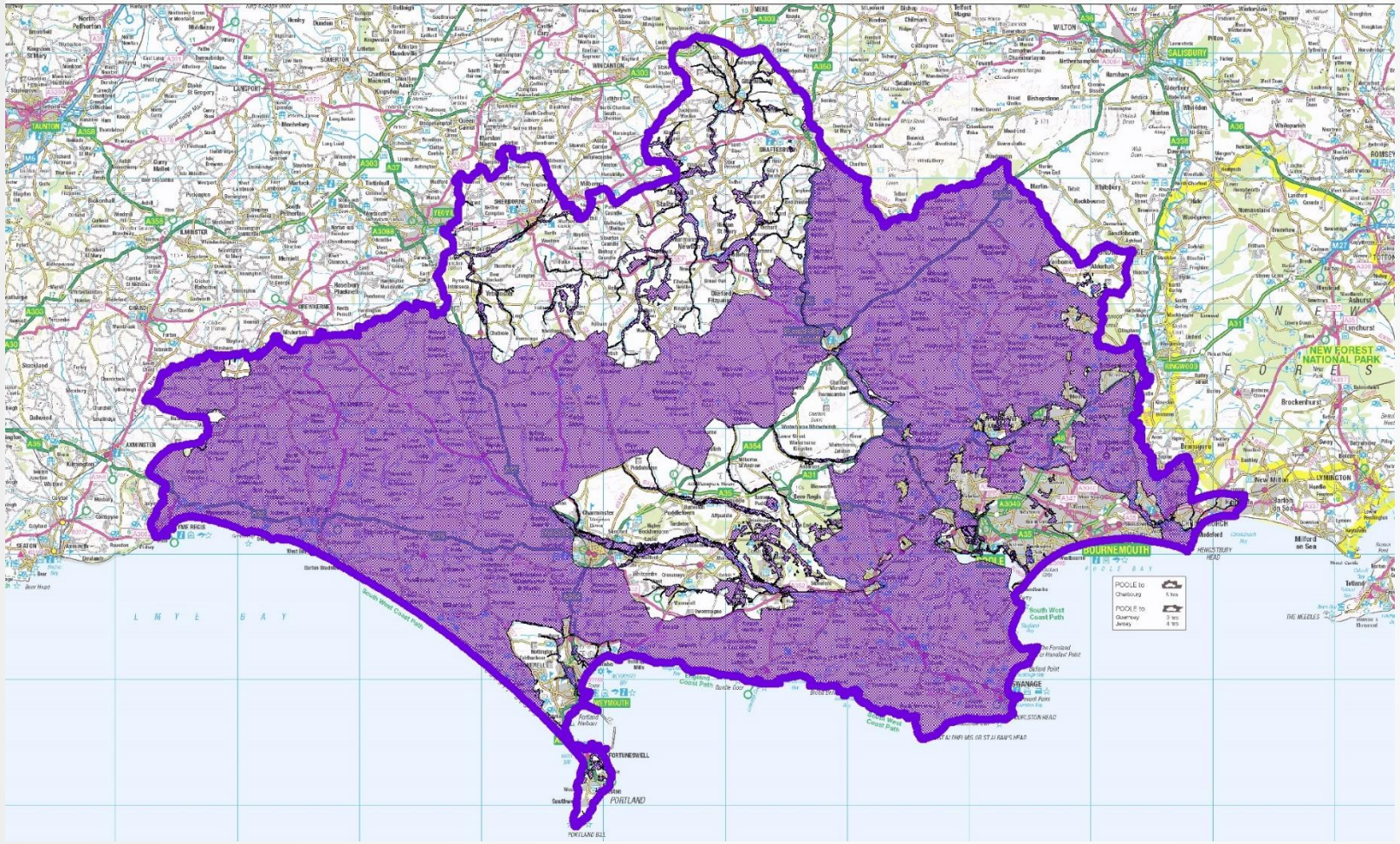
- Road projects can positively impact local employment. But effects are not always positive and **a majority of evaluations show no (or mixed) effects on employment**
- Even when evaluation studies are able to identify a positive impact on employment, **the extent to which this is as a result of displacement from other nearby locations is still unresolved**
- **There is some evidence that road projects have a positive effect on productivity**
- Extending digital infrastructure to an area can positively affect firm productivity, number of businesses, and local labour market outcomes. However, these effects **depend on complementary investments by firms (e.g. training workers, or reorganising supply chains)**
- The economic (employment and turnover) effects of digital infrastructure tended to be larger in urban areas (or close to urban areas) than in rural areas. However, evidence on efficiency suggests the opposite effect – increasing more in rural areas than in urban areas

<u>Policy questions from evaluation evidence:</u>

- **The economic benefits of transport infrastructure spending – particularly as a mechanism for generating local economic growth – are not as clear-cut as they might seem on face value**
- There is little evidence that allows conclusions on whether large-scale infrastructure projects have larger economic growth impacts than spending similar amounts on a collection of small-scale projects
- **ICT infrastructure projects seems to benefit skilled workers more than low or un-skilled workers. However, improved connectivity can overcome digital isolation/digital poverty and promote inclusion.**

(Source: What Works Centre for Local Economic Growth – evidence review and BDUK evaluation of economic impact and public value of superfast broadband programme)

Development & physical considerations



(Source: Dorset Council)

- Environmental designations and Flood zone 3 covers 66.39% of the DLEP area – equivalent to 1,790sqkm
- Green belt protection surrounding most of the urban conurbation
- Limitations on physical development (housing, transport, employment space)
- As a consequence, emphasis on brownfield development
- Dorset also includes nine sites of Marine Conservation Zones and further areas of Special Protection Areas – including Poole Harbour

Local Transport Plan – objectives and priorities

A safe, reliable and accessible low carbon transport system… that assists in the development of a strong low carbon economy, maximises the opportunities for sustainable transport and respects and protects the area's unique environmental assets

Support economic growth

Equality of opportunity

Better safety, security & health

Improved quality of life

Tackling climate change

Value for money

Support a more productive and prosperous economy, by improving the reliability, efficiency and connectivity of transport networks and communications

Reduce the overall level of emissions of carbon dioxide and other greenhouse gases from travel and transport (including improving air quality) and ensure the transport network is resilient

(Source: Local Transport Plan 3 – Bournemouth, Poole and Dorset Strategy Document)

Local Transport Plan – constraints to economic growth

- Population/employment growth – majority of population growth projected to be in BCP, with much in the form of in-fill development and commercial development expected to be focused in identified key growth centres - **adding further pressure to an already full-utilised and constrained local transport network**

- **Key employment growth sites at Bournemouth Airport and Ferndown have poor access**, particularly by sustainable modes

- Traffic growth – traffic modelling of expected growth to 2026 in SE Dorset expects car trips to increase by 12% in AM peak, **resulting in 95% increase in delays and fall in average traffic speed by up to 25%**

- Peak journey times – impact of increasing congestion during peak periods is **resulting in 'peak-spreading'**

- Freight traffic – Port of Poole is a significant freight generator, alongside that associated with mineral extraction from Portland. **The vast majority is transported by road through settlements** due to limitations of the rail infrastructure - causing noise, vibration and pollution problems

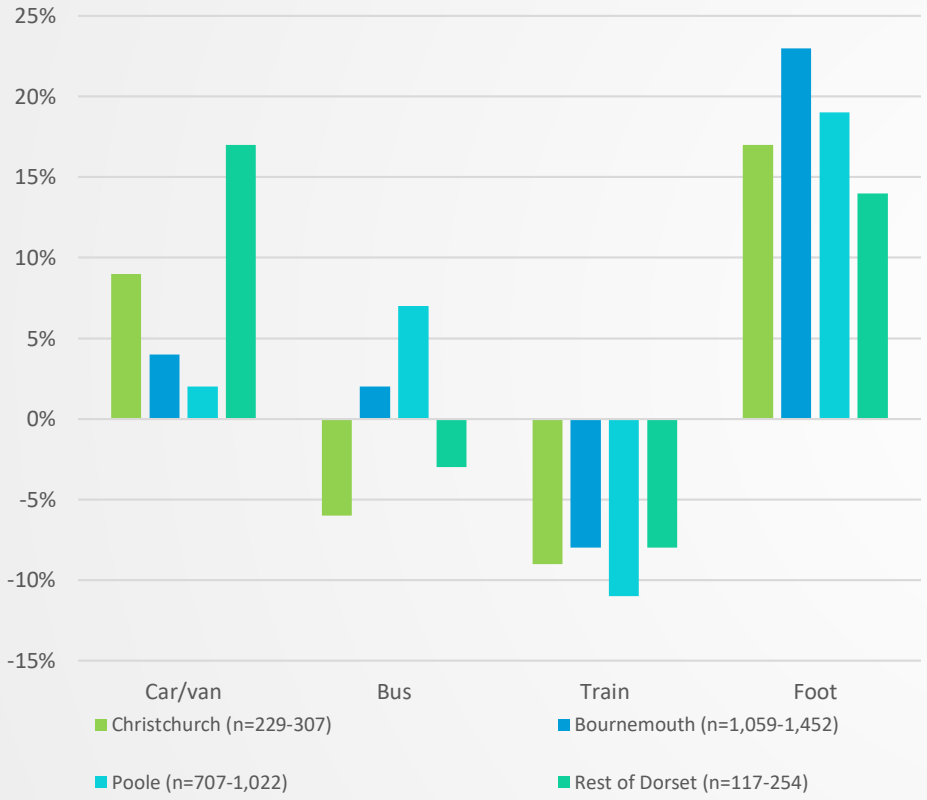
- **Local businesses increasingly expressing concern around sub-standard connectivity** to Bristol and the Midlands/North and to London, and poor connections to/from west and south Dorset

- **Major role of tourism in the area results in significant peak seasonal increases in traffic and congestion, particularly on coastal routes**

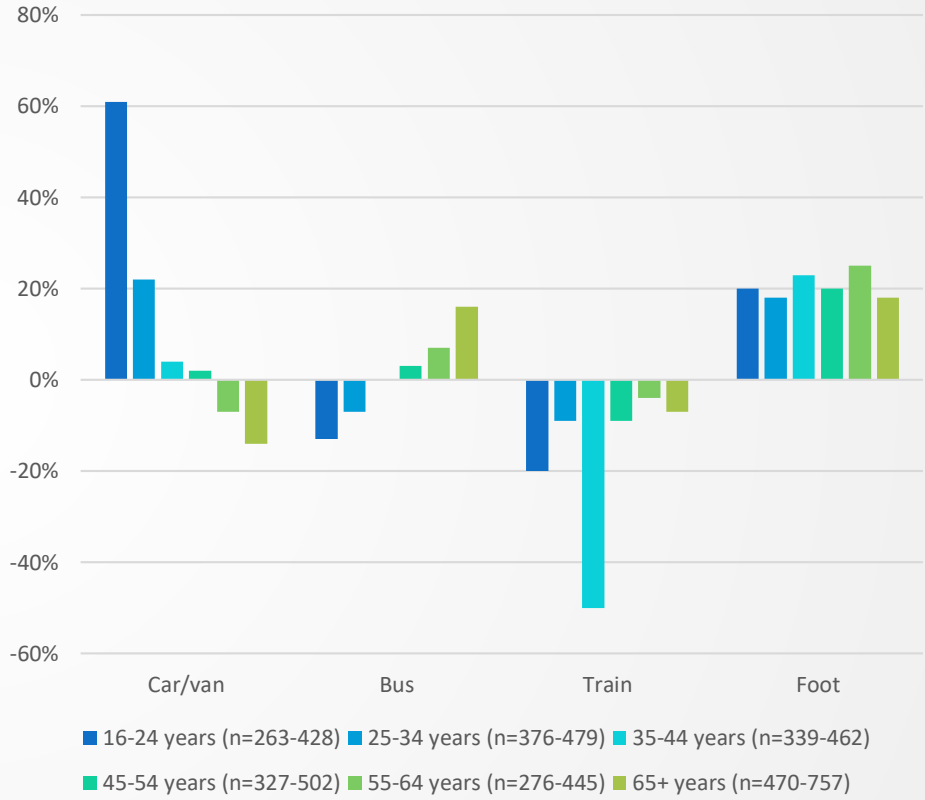
(Source: Local Transport Plan 3 – Bournemouth, Poole and Dorset Strategy Document)

Car transport still increasing in urban area and the young?

Net change in transport mode by residence (% change previous 12 months)



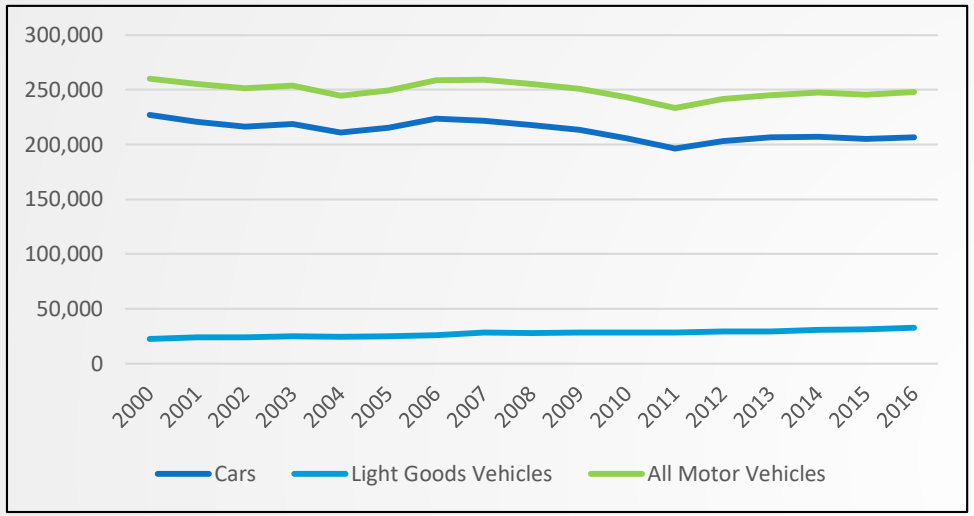
Net change in transport mode by age group (% change previous 12 months)



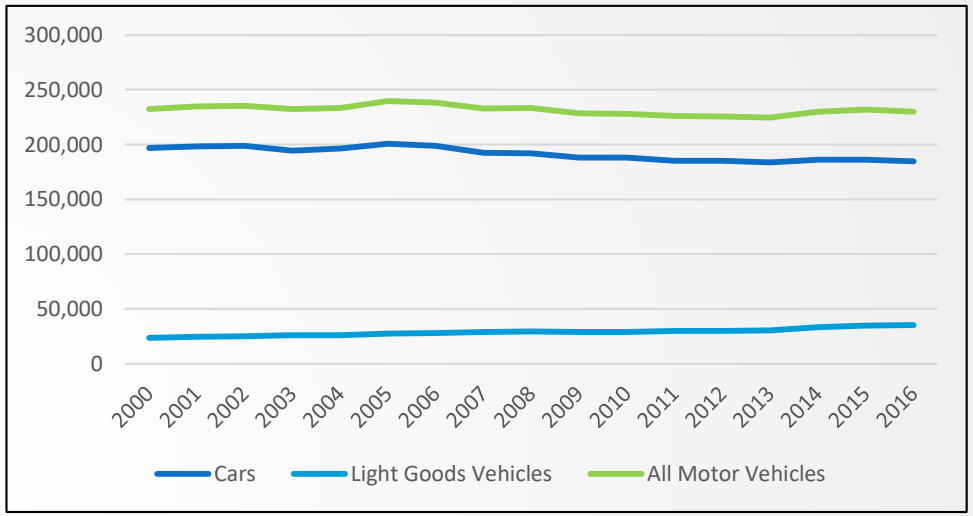
(Source: Bournemouth, Christchurch and Poole Travel Survey – October 18-January 19)

Long-term monitoring statistics paint slightly different picture

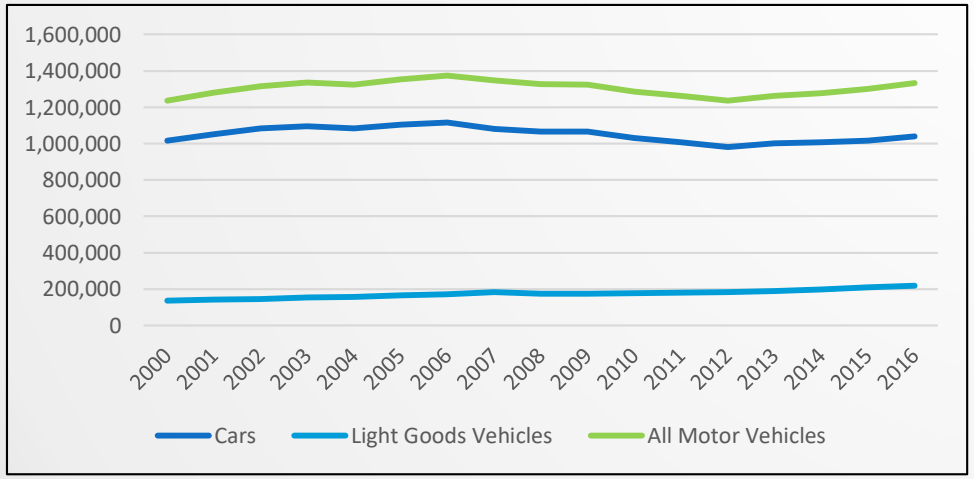
Traffic movements at (26) monitored sites - Bournemouth



Traffic movements at (34-38) monitored sites - Poole



Traffic movements at (86-92) monitored sites - Dorset



- Long-term trend is for decrease in volumes of motor traffic in Bournemouth and Poole
- Car volumes down by 6-7%
- However, there has been an increase in Bournemouth since the recession-related downturn 08-11
- Significant increase in all areas for light good vehicles
- Slight increase in volume in Dorset

(Source: Traffic monitoring statistics – DfT - 2018)

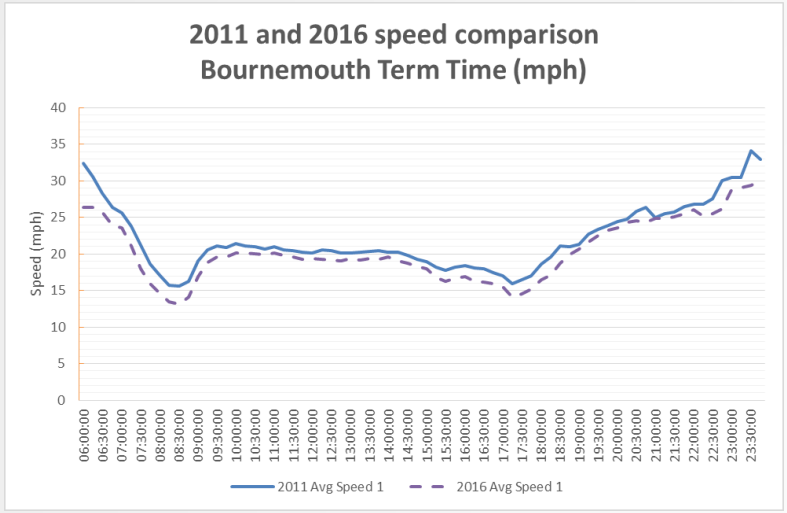
Increasing congestion and slower/longer journey times

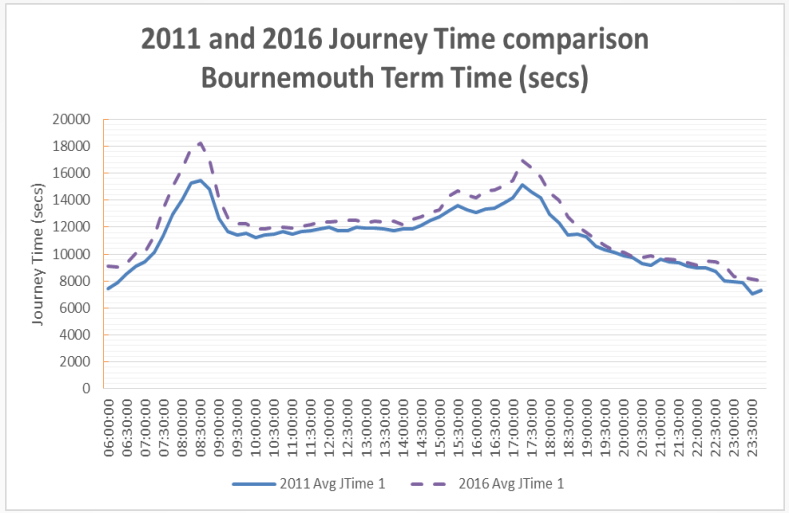
- Motor vehicle traffic volume (in miles) in Bournemouth in 2016 is 5.8% than in 2011 and 3.6% higher in Poole
- Average speeds in Bournemouth & Poole in AM peak (2016) were approximately 2-3mph slower than in 2011
- Traffic growth – traffic modelling of expected growth to 2026 in SE Dorset expects car trips to increase by 12% in AM peak, resulting in 95% increase in delays and fall in average traffic speed by up to 25%
- Journey times in AM peak were 16% longer in Bournemouth and 21% longer in Poole (2011-16)
- Journey times in PM peak have increased by 11% in Bournemouth and 16% in Poole (2011-16)
- Similar increases (9% AM and 10% PM) seen in Dorchester/Weymouth – important local centres
- Between 2015 and 2016 average delay on A roads across Dorset increased by 5.1%, 5.5% in Poole and 1% in Bournemouth

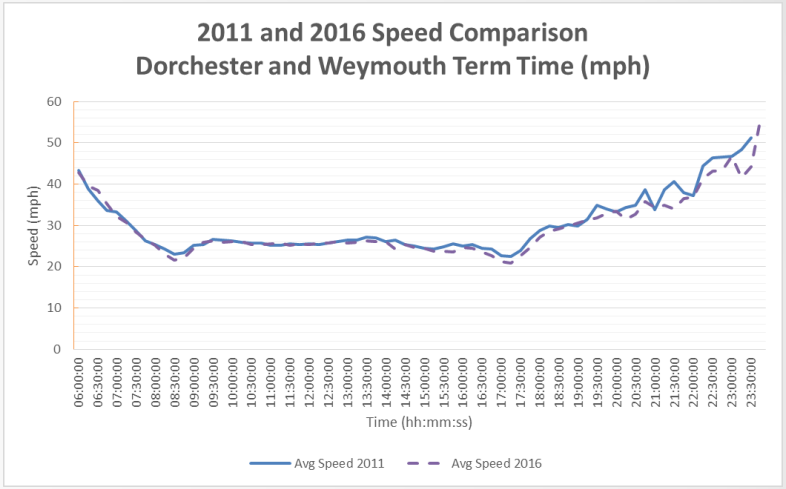
	Average delay (seconds per vehicle per mile)		
	2015	2016	2017
Bournemouth	49.0	49.4	49.5
Poole	49.8	52.5	52.8
Dorset	22.5	24.0	22.6
South West	32.0	33.2	33.7
England	44.6	45.9	46.9

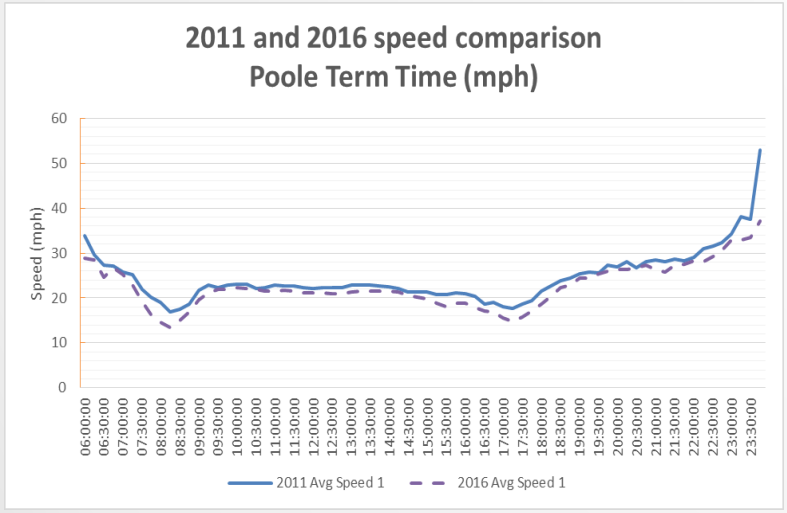
(Source: Highways Analyst and DfT Road congestion and travel times)

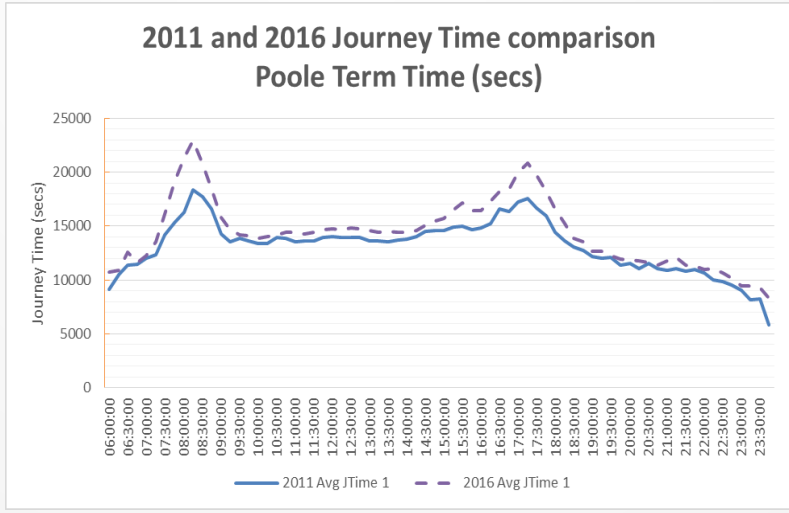
Increasing congestion & slower/longer journey times

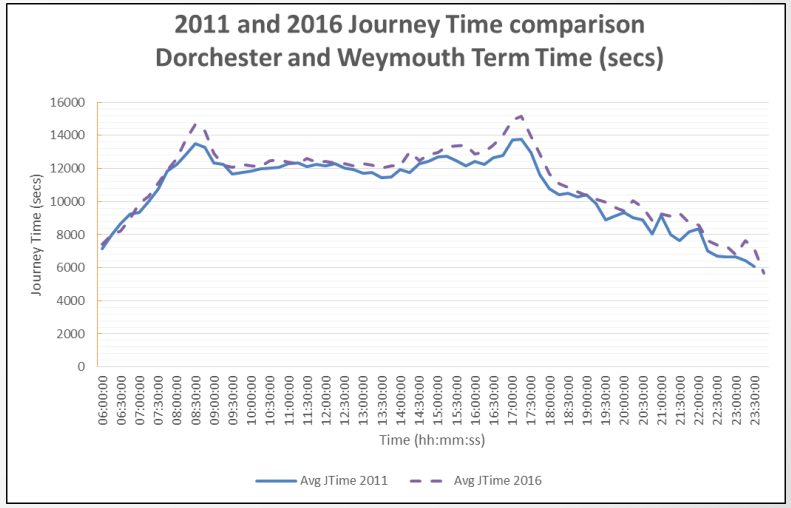












(Source: Congestion Report – Phase 1 – Bournemouth, Poole and Dorset County Council)

Employment space – facilitating economic growth

- ***"The primary constraint to the delivery of employment land in the DLEP area relates to the delivery of key transport infrastructure"***

- Indications are that there has been a **tightening in supply over recent years**, of available industrial and office premises to meet demand – particularly in the urban area

- **There remains pressure to find sufficient employment land if land availability is not to become a constraint on future growth prospects, complicated by environmental and infrastructure constraints**

- There is pressure for conversion to residential use on the existing office stock in Bournemouth and Pool – identified priority to protect

- In DLEP and Eastern Dorset the projections (until 2033) is for 70% of demand is for industrial uses (B1c, B2 and B8) and 30% for B1 office. In Western Dorset split is 78% and 22% respectively

- **In a 'step change scenario' an employment land requirement of circa 279 hectares is expected – including 20% flexibility. This adopted as the preferred scenario given it reflects programmes for current Local Plans and delivery of the full OAN housing needs identified in both Eastern and Western Dorset SHMAs**

(Source: Bournemouth, Dorset and Poole Workspace Strategy - 2016)

Key infrastructure – ports, airport and minerals

Poole Harbour Master Plan - identified weaknesses:

- Draft, length and beam restrictions
- Restricted industrial hinterland
- Distance from national motorway structure and congestion on port access roads
- Restricted port estate area
- Proximity to residential areas
- Need to replace existing port quays and Town quay

Poole Harbour Master Plan objectives, to bring forward schemes:

- Additional capacity for bulk cargo activities
- Additional capacity for cruise ship activities
- A Marine Centre, a Harbour Education Centre and community facilities
- Facilities for marine businesses
- Port infrastructure to support a renewable energy maintenance and support business

- Portland Port – increasing cruise industry centre and other ancillary services (cargo, offshore renewables)

(Source: Poole Harbour Commissioners – Master Plan)

Bournemouth Airport Master Plan – proposals beyond 2015:

- Phased gradual extension of passenger terminal facilities will continue
- Dedicated cargo aircraft parking area
- Additional car parking space
- Progressively reduce the ratio of vehicle trips generated per passenger

(Source: Bournemouth Airport – Master Plan)

Minerals – identified transport limitations:

- Poor transport links present a problem, particularly for Purbeck stone and other building stones, located away from the strategic transport routes. There is one wharf at Poole, handling marine dredged sand and gravel, one railhead at Wool for loading sand sent to London by train and one rail depot at Hamworthy (Poole)

(Source: Bournemouth, Poole and Poole – Minerals Strategy)

Infrastructure: coverage

Area	Superfast (over 30 Mbbps) (% premises)	Ultrafast (over 100 Mbbps) (% premises)	Full Fibre FTTP (% premises)	Download Q1 2019 (Mbps)				Upload Q1 2019 (Mbps)			
				Bottom 20%	Median	Mean	Top 20%	Bottom 20%	Median	Mean	Top 20%
Dorset LEP	97.0%	46.4%	7.4%	8.8	24.3	29.5	45.4	0.8	5.1	6.9	10.4
Dorset	94.6%	6.3%	3.0%								
BCP	99.4%	85.4%	11.6%								
UK	95.7%	57.6%	7.9%								

- Superfast availability in BCP is high, comparing favourably to average UK availability and speeds – including full fibre availability
- Superfast coverage significantly lower in Dorset Council area – over 20% of premises (residential and business) do not have access to superfast capability

(Source: thinkbroadband – June 2019)

Infrastructure: current broadband infrastructure

Area	Superfast (over 30 Mbbps) (% premises)	Ultrafast (over 100 Mbbps) (% premises)
Dorset LEP	97.0%	46.4%
Dorset Council	94.6%	6.3%
BCP	99.4%	85.4%
UK	95.7%	57.6%

- Access to superfast broadband across Dorset is good, comparing favourably with the UK baseline. Further work is required to balance the digital divide between urban and rural.

- Take up and use of publicly subsidised improved digital services in Dorset is 57%, meaning nearly half of those residents and businesses who can use a faster broadband service have not yet done so – untapped potential from a business community perspective.

(Source: thinkbroadband – June 2019)

Infrastructure: future broadband infrastructure

Area	Full Fibre FTTP (% premises)
Dorset LEP	7.4%
Dorset Council	3.0%
BCP	11.6%
UK	7.9%

- Government's 'outside-in' approach focussing on the final 10% most rural parts of the UK is likely to include more than 10% of Dorset
- There is likelihood that near-ubiquitous coverage and a diverse market for full fibre in BCP Council will be commercially realised, this is unlikely in Dorset Council
- Densification of full fibre infrastructure is required for 5G and Smart Place benefits to be realised.

(Source: thinkbroadband – June 2019
Future Telecoms Infrastructure Review – DCMS – July 2018)

5G and Smart City agenda

Dorset is at forefront of 5G wireless communications technology plans. Dorset is spearheading the development of a Smart Place ecosystem to include gigabit fibre connectivity, public WiFi, Internet of Things, 5G (low, mid and high bands) and a platform with an open, agnostic architecture that hosts 'place data' – enabling application development.

The opportunity:
The early deployment of Dorset's 'smart place' network and platform offers businesses the opportunity to gain first-mover advantage in global markets, enabling companies to conduct
pioneering hardware and software R&D and to test new business models across a number of areas:

- **Manufacturing** – manufacturers of mobile devices, intelligent devices and machines e.g. smart home technology, IoT sensor equipment
- **Platform** – open, agnostic data architecture, cyber security, data analytics etc.
- **Infrastructure** – network design, 5G core networks, cyber security etc.
- **Applications** – applications in sectors e.g. community, health and social care, mobility, security, creative applications using augmented reality etc.

Case Study:
Lansdown Business District:
Already a test bed for the development by Ordnance Survey of a 5G mapping tool, Dorset is playing a key role in the world-wide development of 5G technology. 5G is earmarked for launch in one of Bournemouth's primary business districts, Lansdowne. Alongside its planned revamp and transformation into a next generation commercial business centre, Lansdowne is set to become an epicentre for one of the UK's fastest growing digital economies

R&D Consortium:
Alibaba, Huawei, Siemens and other partners

Infrastructure: identified housing need

Identified housing need (informing Local Plan review for BCP and Dorset Councils)

Area	Results with latest (2018) affordability figures			
	Annual households 2014-based forecasts (2019-2029)	Affordability (2018)	Adjustment factors	Local Housing Need (capped)
Bournemouth	1,113	8.44	0.28	1,422
Poole	603	9.28	0.33	801
Christchurch	249	12.95	0.56	349
East Dorset	316	12.00	0.50	442
North Dorset	266	9.39	0.34	355
Purbeck	131	9.94	0.37	179
West Dorset	396	11.03	0.44	811
Weymouth and Portland	187	8.70	0.29	
BCP area	1,965			2,572
Dorset Council area	1,295			1,787
Total (DLEP area)	3,260			4,359

(Source: Local Planning Authorities)

Infrastructure: housing delivery largely below targets

Housing Delivery Test: 2018 measurement

Area	Total number of homes required (2015-18)	Total number of homes delivered (2015-18)	Housing Delivery Test : 2018 measurement	Housing Delivery Test : consequence
Bournemouth	2,353	1,970	84%	Buffer
Poole	1,500	1,276	85%	Action Plan
Christchurch & East Dorset	1,528	1,141	75%	Buffer
North Dorset	638	521	82%	Buffer
Purbeck	337	445	132%	None
Weymouth & Portland and West Dorset	1,611	2,076	129%	None

(Source: Housing Delivery Test: 2018 measurement - MHCLG)

- Housing delivery against requirement falling short in several areas, although exceeded in others
- Several planning areas have been identified as requiring a 'buffer' i.e. revisiting Local Plans and allocating 20% more land for development than currently allocated in five-year pipeline
- Market is not delivering the right type of housing mix – fewer than targeted affordable/smaller homes. Is housing market delivery meeting the needs of the young?
- Affordable housing tends to be dependent on S106 agreements from large-scale developments – relative lack of large-scale delivery therefore flowing through to affordable housing delivery

Statement of Common Ground – some key issues identified

- **Local housing needs assessments do not take account of physical constraints** e.g. Green Belts, AONB etc. which may restrict the ability of the Eastern Dorset authorities in particular to plan for their housing requirements

- Strong possibility that Bournemouth and Christchurch will be unable to meet their housing needs **as a result of their limited geographical areas and significant environmental constraints**

- **The need for strategic transport infrastructure to support the delivery of future development, in particular the potential increase in the rate of housing development, is a critical issue** that needs to be addressed jointly as part of an integrated strategy to deliver infrastructure improvements alongside new homes and jobs

- National planning policy states that local planning authorities in their local plans should take a strategic approach to **maintaining and enhancing networks of habitats and green infrastructure**, and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries. National planning policy framework states that local plans should demonstrate opportunities for net gain.

- National planning policy highlights the role of planning in **facilitating social interaction and creating healthy, inclusive communities**

(Source: Statement of Common Ground – Local Planning Authorities - 2019)

Key questions in development of LIS evidence – ideas and innovation

- Evaluation evidence reviewed by What Works Centre for Local Economic Growth suggests that displacement should be an important consideration for the design and appraisal of transport schemes – they do have the potential to displace activity from elsewhere
- Transport constraints including congestion and poor inter-regional connectivity are often cited by the DLEP business community as one of the most significant barriers they face
- Key transport infrastructure improvements have been identified by local partners as important in unlocking key sites – helping to promote employment growth, unlock sites for housing development and facilitating flows to and from key economic assets
- Housing development seems to be as much a question of 'type' (particularly meeting the needs of the young)
- The protection an enhancement of the environment in both a rural and urban context remains a fundamental consideration for the local population – infrastructure improvements need to take place in that context

FOUNDATIONS OF PRODUCTIVITY:

BUSINESS ENVIRONMENT

Business environment: summary

- Business births continue to exceed ‘deaths’ - resulting in an increase in business stock
- Latest data shows a slight weakening of trends – possibly flattening of post-recession bounce
- Net business creation been higher in urban area – both in terms of volume and rate of change
- Growth in scale-up been relatively strong – scale-ups now employing over 25,000 people in DLEP
- Growth companies important in terms of investment flows into the area
- Small number of start-ups generate considerable and sustained growth beyond initial start-up phase
- Creative and digital sector grown strongly in recent years
- Industrial composition - as reflected by employment structure - significantly differs across areas in DLEP
- Recent cluster mapping work illustrated some significant grouping of key sectors
- Evaluation evidence suggests that a hands-on ‘managed brokerage’ approach is more effective than ‘light touch’ support – although more expensive to deliver
- However, on compositive measurements of competitiveness DLEP is judged as ‘mid-range’ in relative terms against other LEP areas

Business focused policies – what the evidence suggests

- **Programmes which used a hands-on, 'managed brokerage' approach may perform better than those using a light touch approach** (although this is based on small amounts of evidence). Taken at face value, this suggests that a strong relationship and a high level of trust between advisor and client may be important to the delivery of positive programme outcomes. It is not clear, however, which of these two approaches is more cost-effective
- **Business advice programmes show somewhat better results for sales (revenue) than they do for employment and productivity, but results are generally mixed**

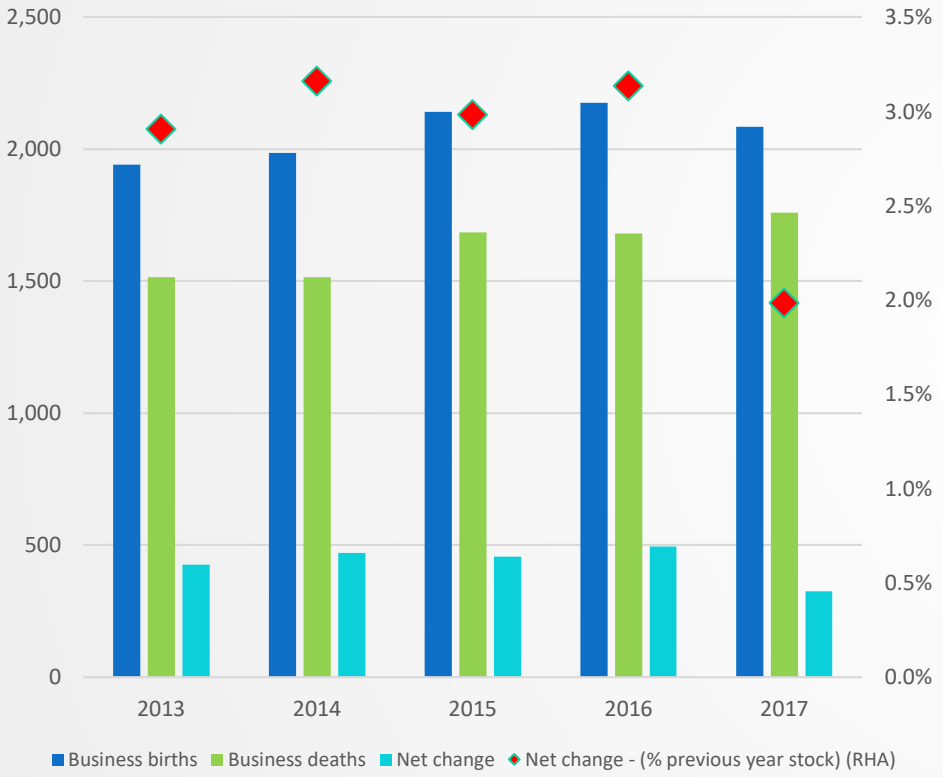
<u>Policy questions from evaluation evidence:</u>

- In the short-term, business advice leads to consistent gains in productivity, rather than employment.
- Encouraging a 'hands on' approach though strong relationships in business advice delivery can lead to better outcomes
- There is no clear difference in success rates of policies delivered either locally or nationally, or those led by the public or private sector
- Understanding what works in business advice can be unclear because of frequent changes in policy

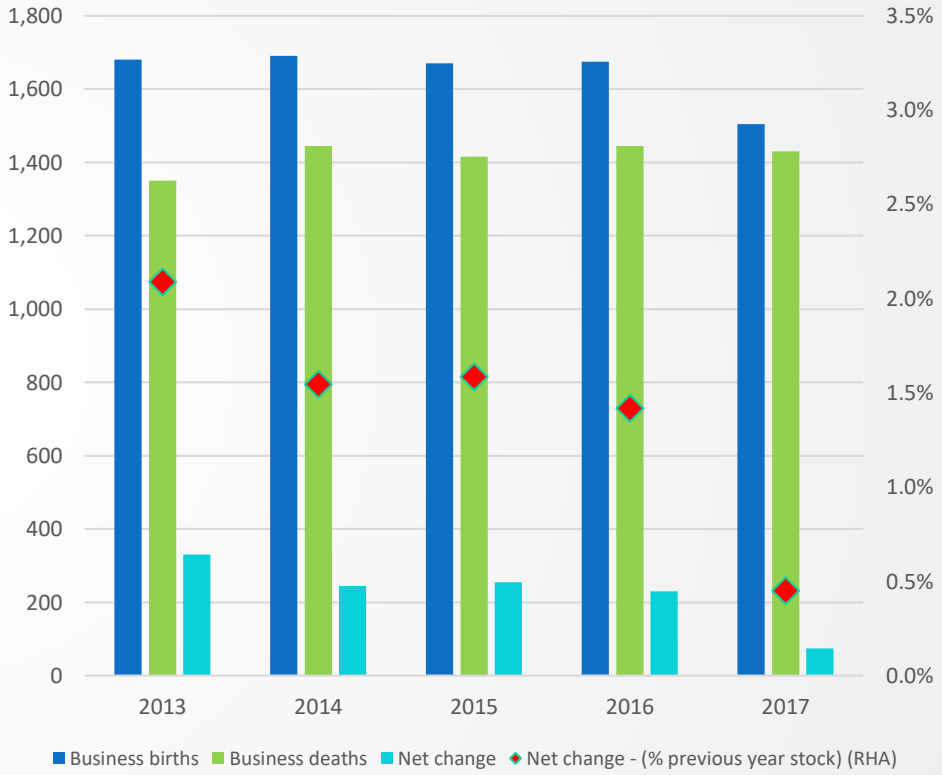
(Source: What Works Centre for Local Economic Growth – evidence review)

Growth in business enterprises – higher in urban area

BCP – business births, deaths, net change (absolute & % business stock)



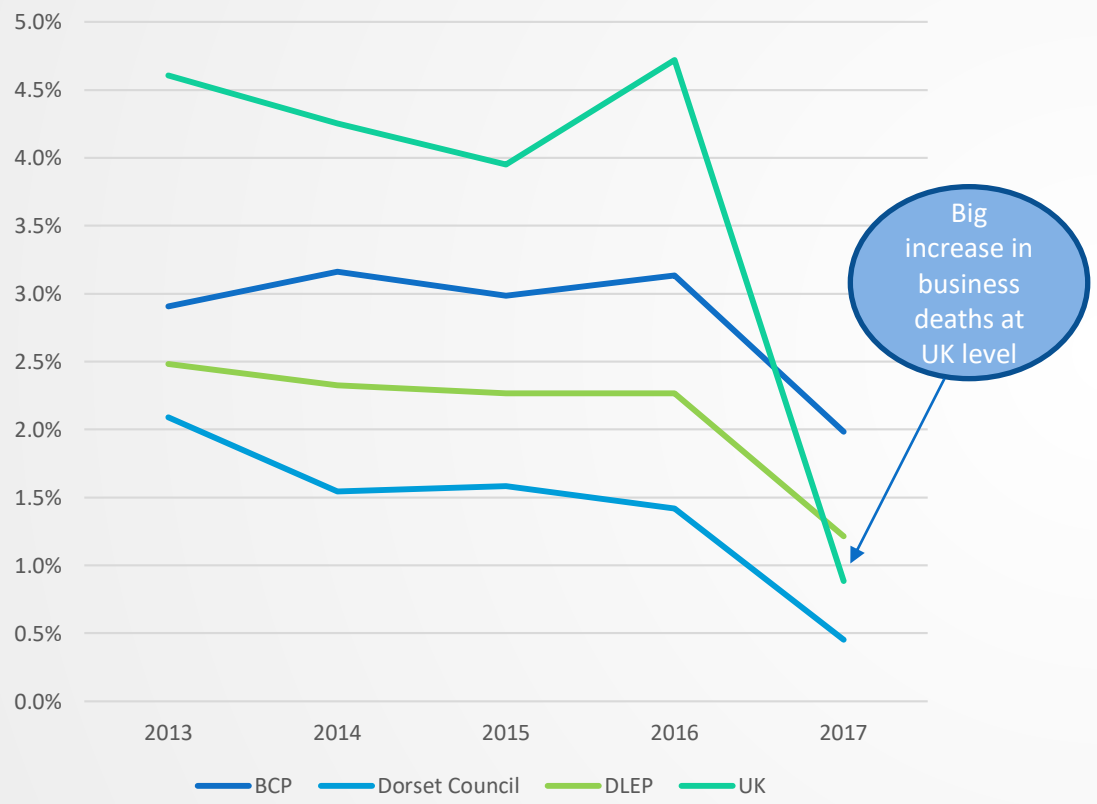
Dorset Council – business births, deaths, net change (absolute & % business stock)



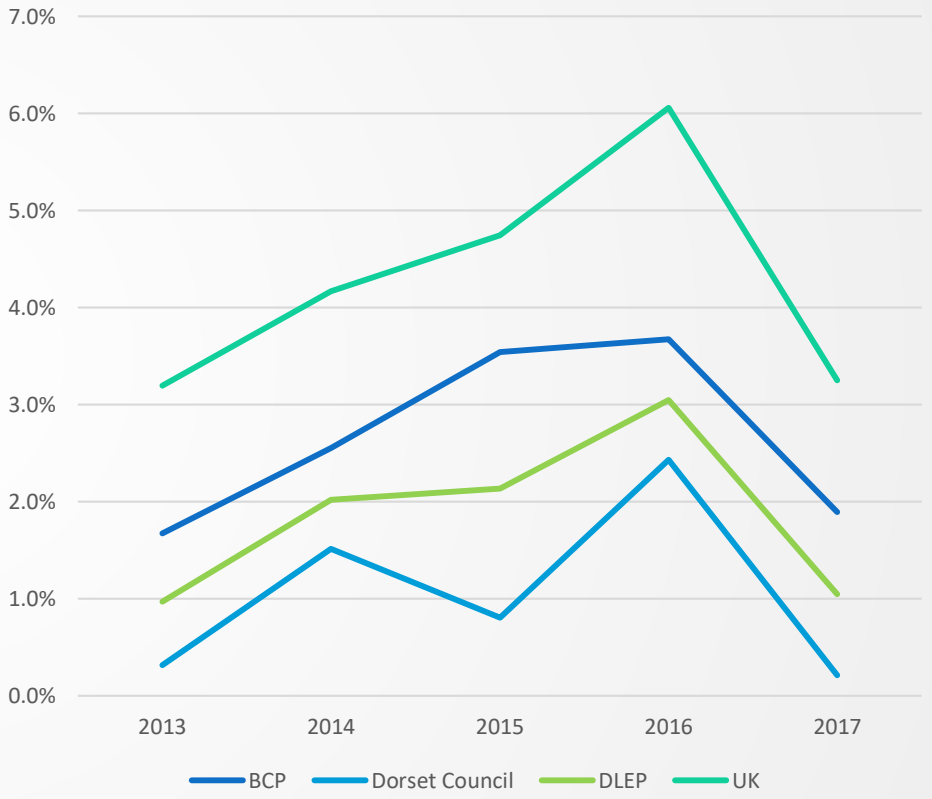
(Source: UK business demography - ONS)

Growth in business enterprises – but slower than national trend

Net change (change as % in previous year's business stock)



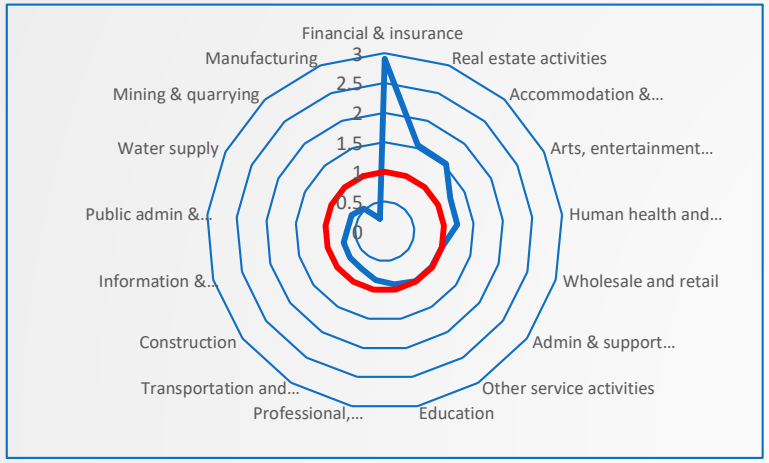
Annual growth rate of active enterprises (% change)



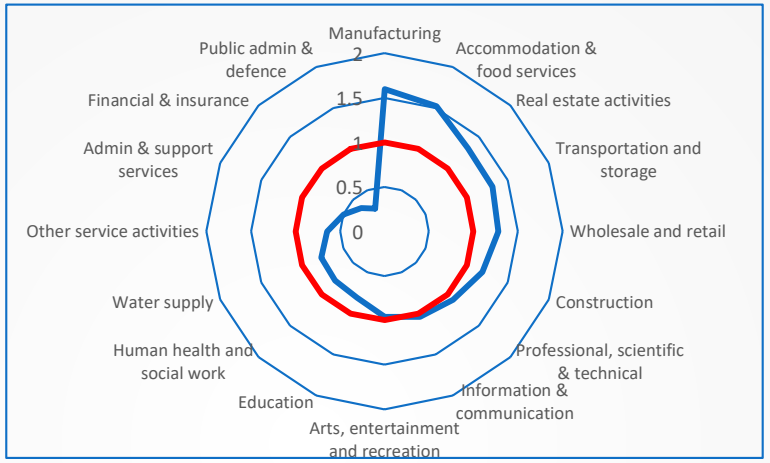
(Source: UK business demography - ONS)

Business environment – relative employment shares (LQ)

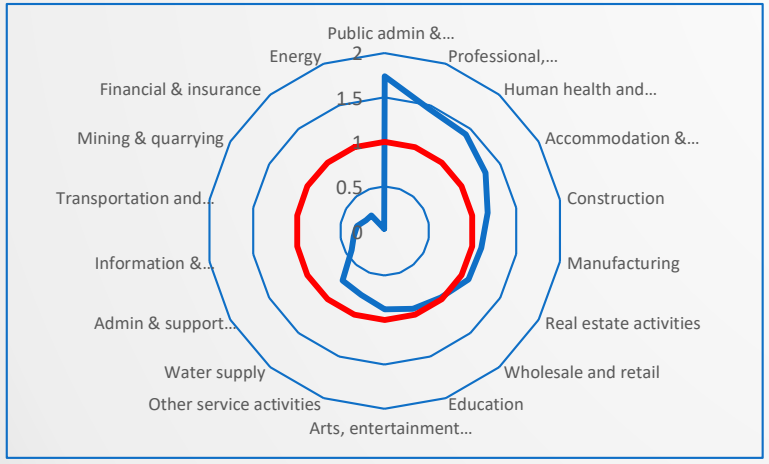
Bournemouth (1 = UK average)



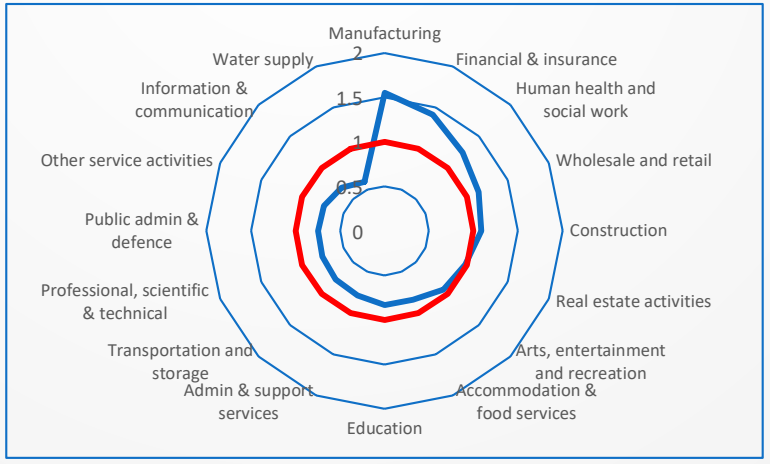
Christchurch (1 = UK average)



West Dorset (1 = UK average)



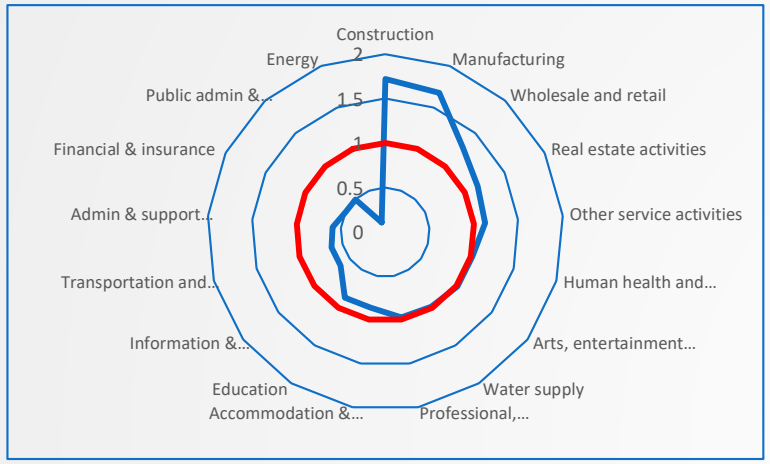
Poole (1 = UK average)



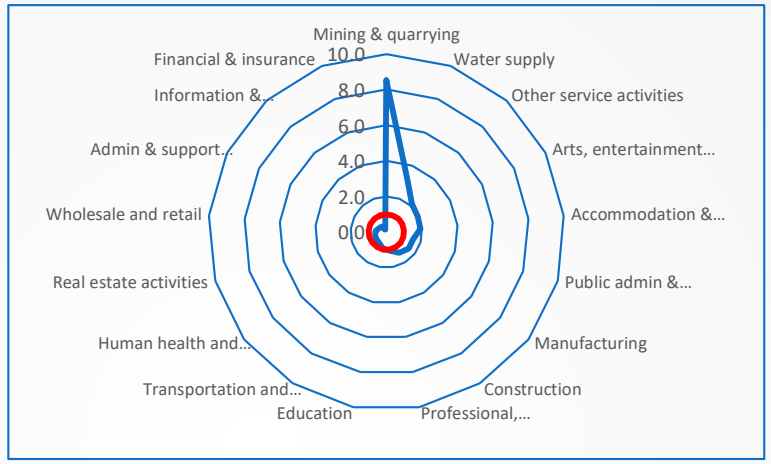
- Key strengths (in terms of relative employment share against UK average) include finance & insurance in Bournemouth, public admin & defence in West Dorset, and manufacturing in Poole and Christchurch
- Lower employment shares (against UK average) include manufacturing in Bournemouth, ICT in most areas

Business environment – relative employment shares (LQ)

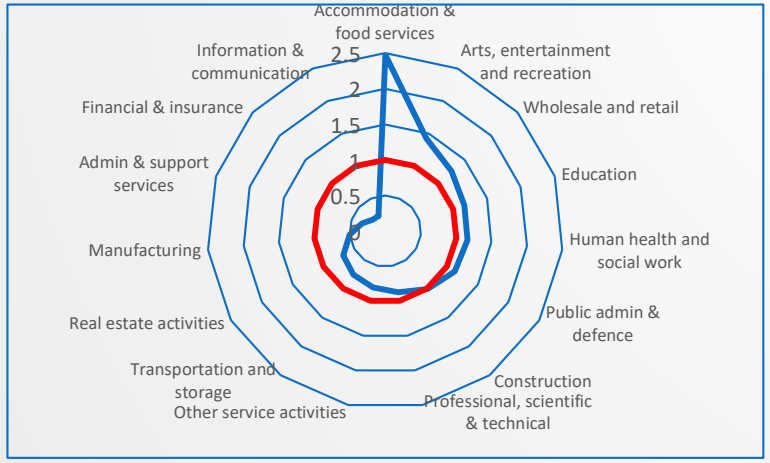
East Dorset (1 = UK average)



Purbeck (1 = UK average)



Weymouth & Portland (1 = UK average)



- Key strengths (in terms of relative employment share against UK average) include mining & quarrying and water supply in Purbeck, and tourism related services in Weymouth & Portland
- Lower employment shares (against UK average) include retail in Purbeck, manufacturing in Weymouth & Portland, and ICT in most areas

Business environment - clusters

Agri-tech Food & Drink

Commissioned by Economic Development, Borough of Poole

Dorset County Council

Across England, 6% of businesses are in this sector employing 4% of employees.

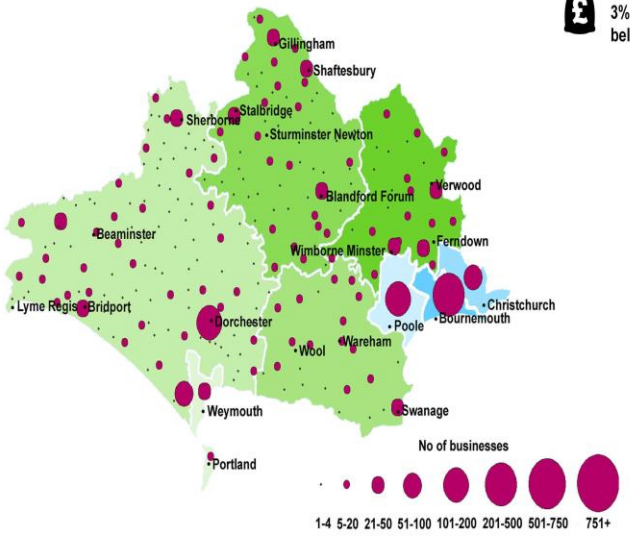
4% of GVA is contributed directly by this sector

Businesses in this sector

3,355 businesses in the Dorset LEP area

9% of all businesses which is above the national average

England (166,380) 6%
Dorset LEP Area (3,355) 9%
Bournemouth, Christchurch & Poole (415) 2%
Dorset Council Area (2,940) 15%
Bournemouth (170) 2%
Christchurch (70) 3%
Poole (180) 2%
East Dorset (370) 8%
North Dorset (825) 21%
Purbeck (295) 12%
West Dorset (1340) 21%
Weymouth & Portland (105) 5%



Value added in this sector

£551m in the Dorset LEP area

3% contribution to total VA which is below the national average

England (61,486m) 4%
Dorset LEP Area (551m) 3%
Bournemouth, Christchurch & Poole (270m) 3%
Dorset Council Area (281m) 4%
Bournemouth (89m) 2%
Christchurch (34m) 3%
Poole (146m) 4%
East Dorset (68m) 4%
North Dorset (52m) 4%
Purbeck (44m) 5%
West Dorset (87m) 4%
Weymouth & Portland (30m) 3%

Employees in this sector

11,000 employees in the Dorset LEP area

3% of all employees which is below the national average

4% England (1,088,000)
3% Dorset LEP Area (11,000)
1% Bournemouth, Christchurch & Poole (2,500)
6% Dorset Council Area (9,000)
1% Bournemouth (700)
1% Christchurch (225)
2% Poole (1,750)
4% East Dorset (1,250)
8% North Dorset (2,000)
9% Purbeck (1,500)
7% West Dorset (3,500)
3% Weymouth & Portland (500)

Creative & Digital

Commissioned by Economic Development, Borough of Poole

Dorset County Council

Across England, 9% of businesses are in this sector employing 4% of employees.

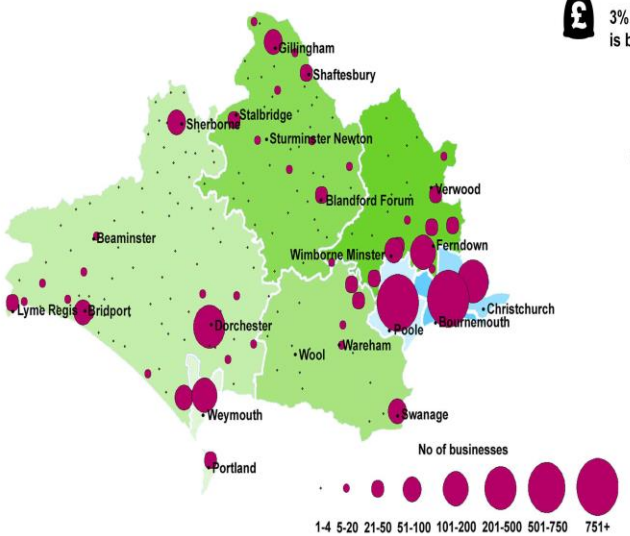
6% of GVA is contributed directly by this sector

Businesses in this sector

2,690 businesses in the Dorset LEP area

7% of all businesses which is below the national average

England (249,290) 9%
Dorset LEP Area (2,690) 7%
Bournemouth, Christchurch & Poole (1,435) 8%
Dorset Council Area (1,255) 6%
Bournemouth (700) 9%
Christchurch (175) 8%
Poole (560) 8%
East Dorset (350) 7%
North Dorset (240) 6%
Purbeck (165) 7%
West Dorset (395) 6%
Weymouth & Portland (105) 5%



Value added in this sector

£447m in the Dorset LEP area

3% contribution to total VA which is below the national average

England (87,050m) 6%
Dorset LEP Area (447m) 3%
Bournemouth, Christchurch & Poole (276m) 3%
Dorset Council Area (171m) 2%
Bournemouth (113m) 3%
Christchurch (43m) 4%
Poole (120m) 3%
East Dorset (44m) 3%
North Dorset (34m) 3%
Purbeck (23m) 3%
West Dorset (53m) 2%
Weymouth & Portland (16m) 2%

Employees in this sector

8,000 employees in the Dorset LEP area

2% of all employees which is below the national average

4% England (1,018,000)
2% Dorset LEP Area (8,000)
3% Bournemouth, Christchurch & Poole (5,000)
2% Dorset Council Area (3,000)
3% Bournemouth (2,250)
3% Christchurch (600)
3% Poole (2,250)
3% East Dorset (800)
3% North Dorset (600)
2% Purbeck (350)
2% West Dorset (1,000)
1% Weymouth & Portland (225)

(Source: Dorset Cluster Analysis – Borough of Poole)

Business environment - clusters

Engineering and Manufacturing

Commissioned by Economic Development, Borough of Poole

Dorset County Council

Across England, 5% of businesses are in this sector employing 6% of employees.

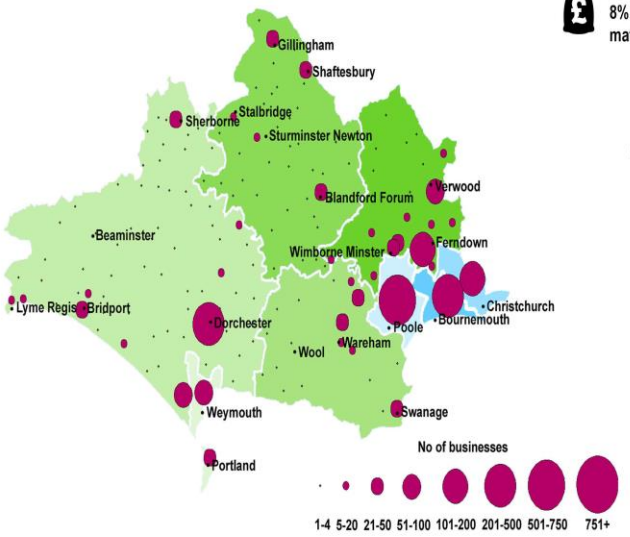
8% of GVA is contributed directly by this sector

Businesses in this sector

2,125 businesses in the Dorset LEP area

6% of all businesses which is above the national average

England (142,490) 5%
Dorset LEP Area (2,125) 6%
Bournemouth, Christchurch & Poole (1,000) 6%
Dorset Council Area (1,125) 6%
Bournemouth (300) 4%
Christchurch (160) 7%
Poole (540) 7%
East Dorset (345) 7%
North Dorset (180) 5%
Purbeck (170) 7%
West Dorset (300) 5%
Weymouth & Portland (135) 6%



Value added in this sector

£1,224m in the Dorset LEP area

8% contribution to total VA which matches the national average

England (120,344m) 8%
Dorset LEP Area (1,224m) 8%
Bournemouth, Christchurch & Poole (573m) 6%
Dorset Council Area (651m) 9%
Bournemouth (128m) 3%
Christchurch (94m) 9%
Poole (352m) 9%
East Dorset (186m) 11%
North Dorset (123m) 10%
Purbeck (90m) 10%
West Dorset (213m) 9%
Weymouth & Portland (39m) 4%

Employees in this sector

25,000 employees in the Dorset LEP area

8% of all employees which is above the national average

6% England (1,609,000)
8% Dorset LEP Area (25,000)
7% Bournemouth, Christchurch & Poole (13,000)
8% Dorset Council Area (12,000)
2% Bournemouth (1,500)
11% Christchurch (2,250)
11% Poole (9,000)
13% East Dorset (4,000)
7% North Dorset (1,750)
13% Purbeck (2,250)
6% West Dorset (3,000)
5% Weymouth & Portland (900)

Finance & Professional

Commissioned by Economic Development, Borough of Poole

Dorset County Council

Across England, 30% of businesses are in this sector employing 23% of employees.

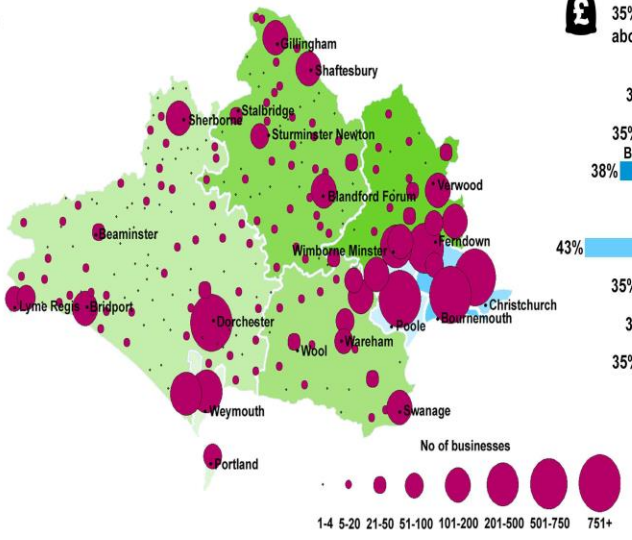
33% of GVA is contributed directly by this sector

Businesses in this sector

9,705 businesses in the Dorset LEP area

26% of all businesses which is below the national average

England (813,530) 30%
Dorset LEP Area (9,705) 26%
Bournemouth, Christchurch & Poole (5,075) 29%
Dorset Council Area (4,630) 23%
Bournemouth (2,255) 28%
Christchurch (625) 27%
Poole (2,195) 30%
East Dorset (1,340) 28%
North Dorset (840) 21%
Purbeck (550) 22%
West Dorset (1,465) 22%
Weymouth & Portland (435) 20%



Value added in this sector

£5,586m in the Dorset LEP area

35% contribution to total VA which is above the national average

England (487,256m) 33%
Dorset LEP Area (5,586m) 35%
Bournemouth, Christchurch & Poole (3,424m) 38%
Dorset Council Area (2,162m) 31%
Bournemouth (1,763m) 43%
Christchurch (359m) 35%
Poole (1,302m) 33%
East Dorset (598m) 35%
North Dorset (332m) 27%
Purbeck (269m) 31%
West Dorset (696m) 30%
Weymouth & Portland (267m) 30%

Employees in this sector

63,000 employees in the Dorset LEP area

19% of all employees which is below the national average

23% England (5,801,000)
19% Dorset LEP Area (63,000)
23% Bournemouth, Christchurch & Poole (42,000)
15% Dorset Council Area (21,000)
26% Bournemouth (22,000)
18% Christchurch (3,500)
21% Poole (17,000)
14% East Dorset (4,500)
10% North Dorset (2,500)
13% Purbeck (2,250)
17% West Dorset (9,000)
11% Weymouth & Portland (2,000)

(Source: Dorset Cluster Analysis – Borough of Poole)

Business environment - clusters

Health & Social Care

Commissioned by Economic Development, Borough of Poole

Dorset County Council

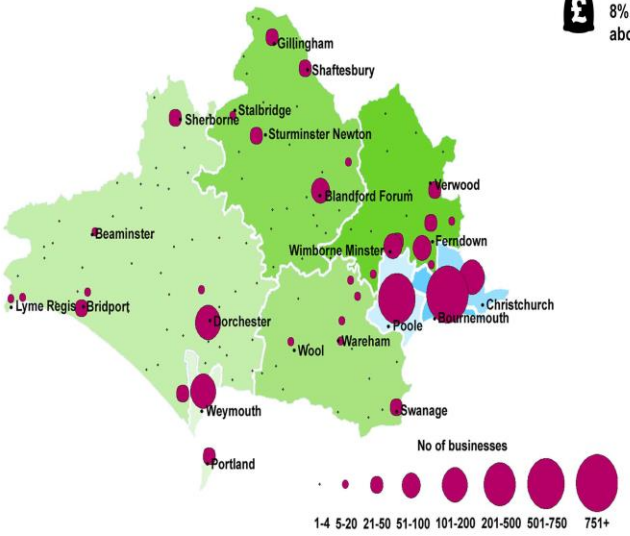
Across England, 5% of businesses are in this sector employing 13% of employees. 7% of GVA is contributed directly by this sector

Businesses in this sector

2,085 businesses in the Dorset LEP area

6% of all businesses which is above the national average

England (142,990) 5%
Dorset LEP Area (2,085) 6%
Bournemouth, Christchurch & Poole (1,105) 6%
Dorset Council Area (980) 5%
Bournemouth (570) 7%
Christchurch (120) 5%
Poole (415) 6%
East Dorset (215) 4%
North Dorset (165) 4%
Purbeck (95) 4%
West Dorset (345) 5%
Weymouth & Portland (160) 7%



Value added in this sector

£1,335m in the Dorset LEP area

8% contribution to total VA which is above the national average

England (105,087m) 7%
Dorset LEP Area (1,335m) 8%
Bournemouth, Christchurch & Poole (763m) 8%
Dorset Council Area (571m) 8%
Bournemouth (363m) 9%
Christchurch (54m) 5%
Poole (346m) 9%
East Dorset (105m) 6%
North Dorset (100m) 8%
Purbeck (62m) 7%
West Dorset (227m) 10%
Weymouth & Portland (78m) 9%

Employees in this sector

49,000 employees in the Dorset LEP area

15% of all employees which is above the national average

13% England (3,316,000)
15% Dorset LEP Area (49,000)
16% Bournemouth, Christchurch & Poole (29,000)
13% Dorset Council Area (19,000)
17% Bournemouth (14,000)
10% Christchurch (2,000)
16% Poole (13,000)
14% East Dorset (4,500)
10% North Dorset (2,500)
7% Purbeck (1,250)
17% West Dorset (9,000)
14% Weymouth & Portland (2,500)

Marine

Commissioned by Economic Development, Borough of Poole

Dorset County Council

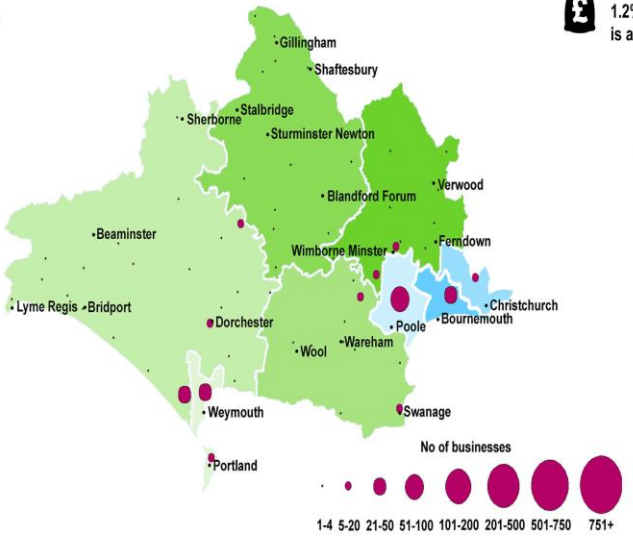
Across England, 0.2% of businesses are in this sector employing 0.3% of employees. 0.7% of GVA is contributed directly by this sector

Businesses in this sector

280 businesses in the Dorset LEP area

0.7% of all businesses which is above the national average

England (6,265) 0.2%
Dorset LEP Area (280) 0.7%
Bournemouth, Christchurch & Poole (110) 0.6%
Dorset Council Area (170) 0.9%
Bournemouth (20) 0.2%
Christchurch (20) 0.9%
Poole (75) 1.0%
East Dorset (20) 0.4%
North Dorset (10) 0.3%
Purbeck (30) 1.2%
West Dorset (40) 0.6%
Weymouth & Portland (75) 3.5%



Value added in this sector

£198m in the Dorset LEP area

1.2% contribution to total VA which is above the national average

England (10,396m) 0.7%
Dorset LEP Area (198m) 1.2%
Bournemouth, Christchurch & Poole (92m) 1.0%
Dorset Council Area (106m) 1.5%
Bournemouth (18m) 0.4%
Christchurch (15m) 1.4%
Poole (60m) 1.5%
East Dorset (30m) 1.8%
North Dorset (21m) 1.7%
Purbeck (15m) 1.8%
West Dorset (33m) 1.4%
Weymouth & Portland (6m) 0.7%

Employees in this sector

3,000 employees in the Dorset LEP area

0.9% of all employees which is above the national average

0.3% England (85,000)
0.9% Dorset LEP Area (3,000)
1.4% Bournemouth, Christchurch & Poole (2,500)
0.6% Dorset Council Area (800)
0.0% Bournemouth (25)
0.1% Christchurch (25)
2.8% Poole (2,250)
0.1% East Dorset (20)
0.0% North Dorset (10)
1.5% Purbeck (250)
0.3% West Dorset (150)
2.2% Weymouth & Portland (400)

(Source: Dorset Cluster Analysis – Borough of Poole)

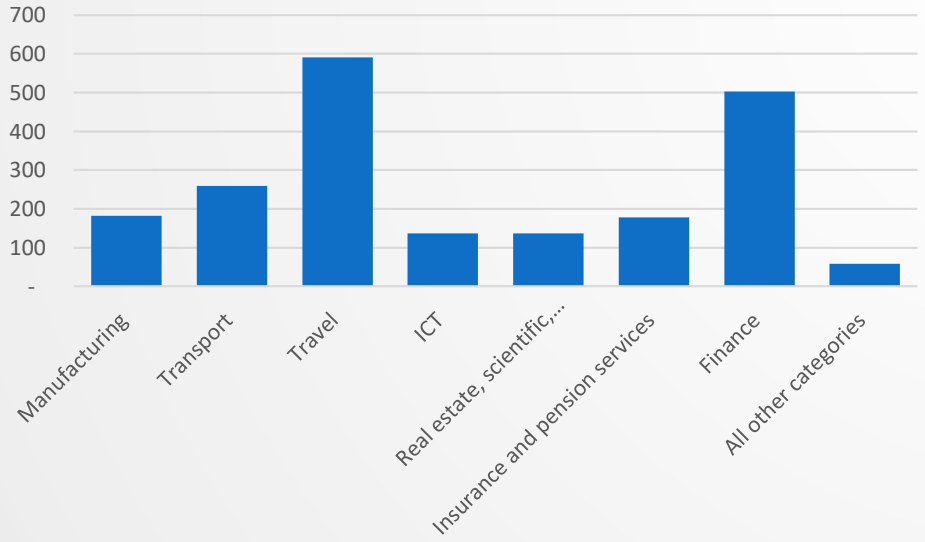
Finance and tourism drive service sector exports

Value of exports (£bn – South West)

2013	2014	2015	2016	2017	Growth (2016-2017)
£17.5bn	£16.5bn	£16.4bn	£18.2bn	£20.7bn	13.8% (UK = 12.8%)

(Source: HMRC Regional Trade Statistics)

Value of service exports (£mn – 2016 – Dorset and Somerset)



Total value of service exports (£mn – 2016)	
Bournemouth & Poole	£1,018mn
Dorset CC	£311
Total	£1,329

Data only available for service exports at local level. Regional estimates for all exports (inc. product)

(Source: Regionalised estimates of service exports - ONS)

Foreign Direct (inward) Investment – DLEP trends

Foreign Direct Investment – DLEP area

	Annual - total reported DIT & DLEP supported FDI successes	Other FDI (non-involved successes)	New jobs	Safeguarded job
2012/13	5	0	10	122
2013/14	4	0	7	2,315
2014/15	11	3	132	291
2015/16	11	5	292	50
2016/17	13	1	356	82
2017/18	11	4	243	
2018/19	15	6	111	11

- In contrast to national and regional trends, DLEP area has seen a modest increase in FDI projects. The number of projects where the inward investment team has been involved in has increased by circa 20%
- FDI expected to come under further pressure after Brexit – with lower levels of inward investment already seen over last 2-3 years. Competition (within UK and internationally) expected to intensify.

(Source: Dorset Inward Investment Team)

Inward investment opportunities

➢ **Aerospace, Maintenance, Repair and Overhaul (MRO):**

- Strong reputation as an aerospace and manufacturing specialist – home to high-profile global companies including AIM Altitude, Babcock International, Cobham Aviation Services, Curtiss-Wright and Honeywell International
- Circa £60mn investment secured in local transport and infrastructure in and around Bournemouth Airport and Aviation Business Park
- 10,000 – 40,000 sq. ft of design & build opportunity

➢ **Cyber Security:**

- Prominent businesses include ESET, LiMETOOLS and Electus Recruitment
- Dorset Cyber Alliance (DCA) combines international expertise with local knowledge of cyber security implementation
- Strong HE focus with Bournemouth University's Cyber and IoT Labs

➢ **5G ecosystem:**

- BCP area estimated to be top area for high-growth digital businesses
- 5G R&D Consortium includes major private sector partners, with a 5G testbed earmarked to be launched in the Lansdowne business district
- Universities and FE Colleges offer a range of digital intensive courses

➢ **Aquaculture:**

- Three drivers of opportunities – changing consumption preferences, demand for sustainable aquaculture (reduced environmental impact), and increased technology development and deployment
- Cefas (presence in Weymouth) world-leading facility in marine science and technology, providing innovative solutions for aquatic environment, biodiversity and food security
- Businesses such as Dorset Seaweed Company, Offshore Shellfish, Dorset Cleaner Fish, Houghton Spring Farms, Othniel Oyster taking forward sustainable aquaculture practise

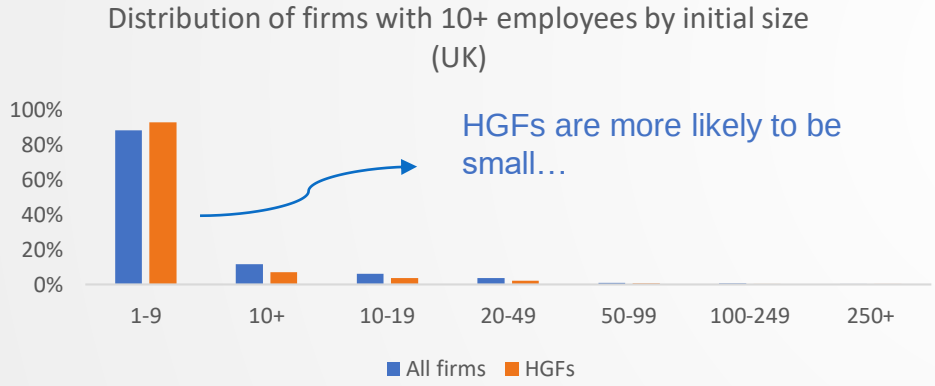
➢ **Visual Effects:**

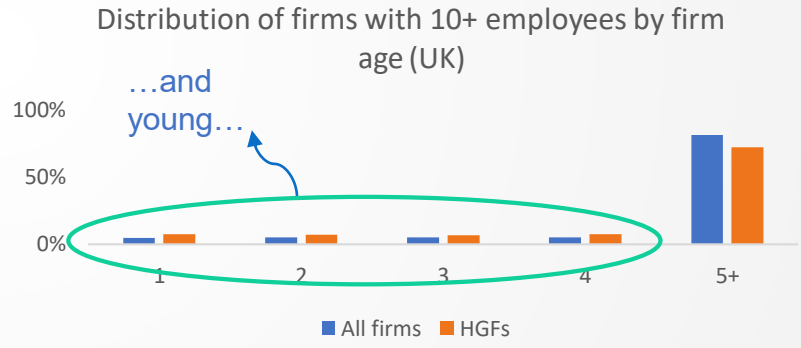
- Dorset growing centre of excellence for visual effects
- Several film studios based in area as is the National Centre for Computer Animation (NCCA)
- Smart Place ecosystem expected to be a major pull for technology-based companies
- Bournemouth University and Arts University Bournemouth produce circa 800 multi-discipline media graduates per year – businesses able to draw on deep visual effects, animation and post-production talent pool

(Source: Dorset Inward Investment Team)

Importance of scale-ups as drivers of economic growth

- There are now a third more scaleups than in 2013 – nationally 36,510 businesses growing their turnover or number of employees by more than 20% p.a.
- On average they are 42% more productive than peers (recognising cause-consequence effects)
- All LEPs and devolved nations are experiencing a growth rate of greater than 1 additional scaleup per 100,00 of population
- The pace of scale-up growth is quickening in Dorset LEP area





Growth rate in number of scaleups per 100k population

	2014-17	2013-16
Dorset LEP	3.1	1.8

(Source: Scale-Up Institute Local Insights Report)

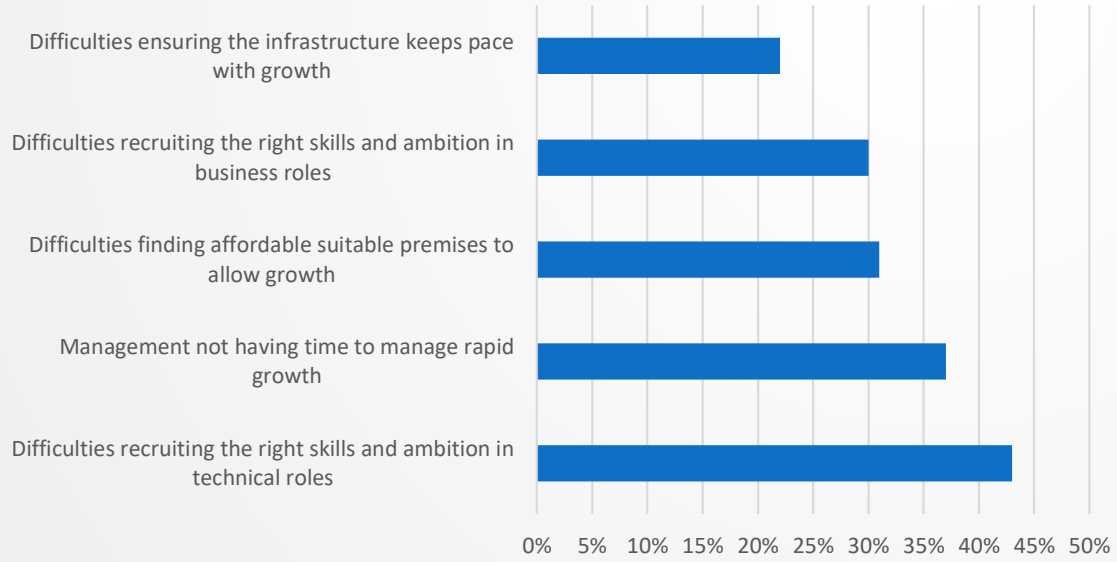
Importance of scale-ups as drivers of economic growth

Dorset LEP – Scale-Up landscape

Total no: scaleups	No: by employee growth	No: by turnover growth	No: by employee and turnover growth	Total employees	Total turnover
365	135	280	50	25,419	£2.9bn

(Source: Scale-Up Review 2018)

Most significant barriers to achieving growth (% survey respondents)



(Source: SW Scale-Ups Research 2017)

- But significant barriers remain – including getting staff with the right technical skills and management capability and capacity

Growth companies and scale-ups

196 companies in DLEP defined as growth companies*

£3.1bn in reported turnover

Average turnover £51mn

44 are scaleups

3 are academic spinouts

£120mn raised (since 2011)

168 equity fundraisings (since 2011)

£726k average amount raised

£1.6mn South East average amount raised

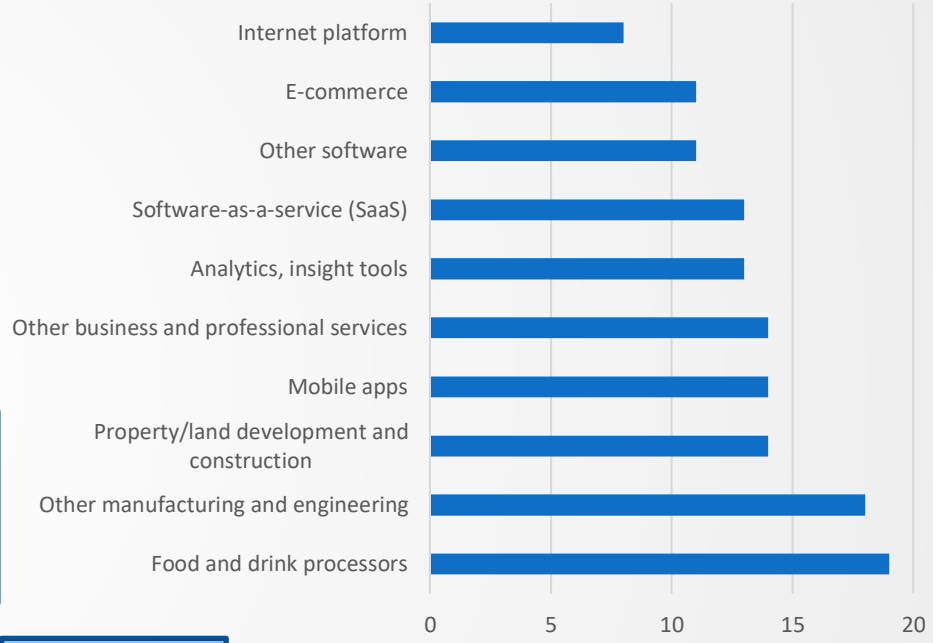
£6.6mn value of grants received

44 grants received

£149k average grant amount

£226k South East average grant amount

Sector breakdown of growth companies

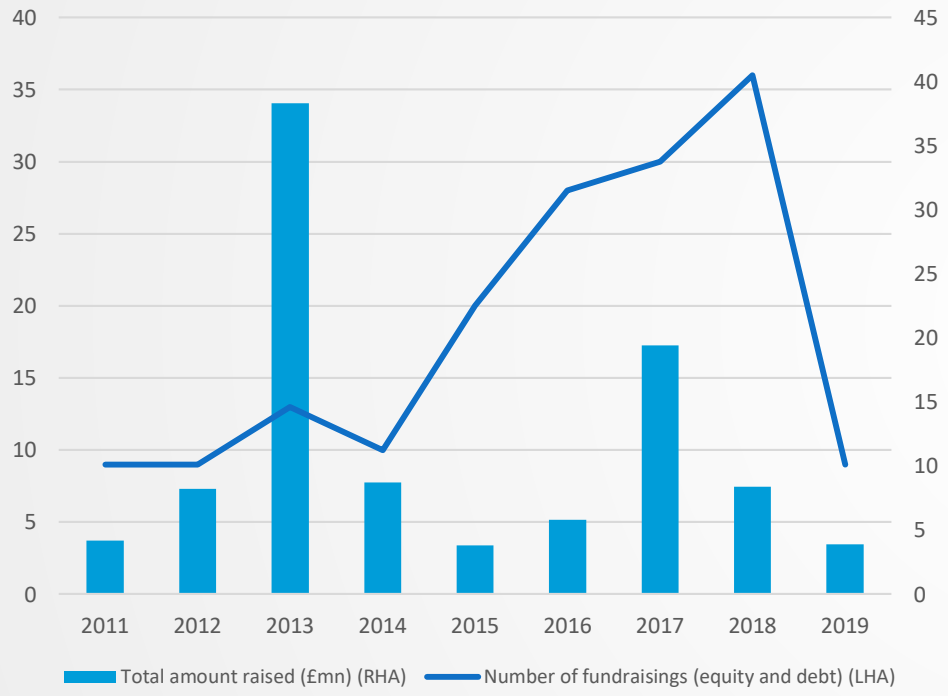


(Source: Beahurst)

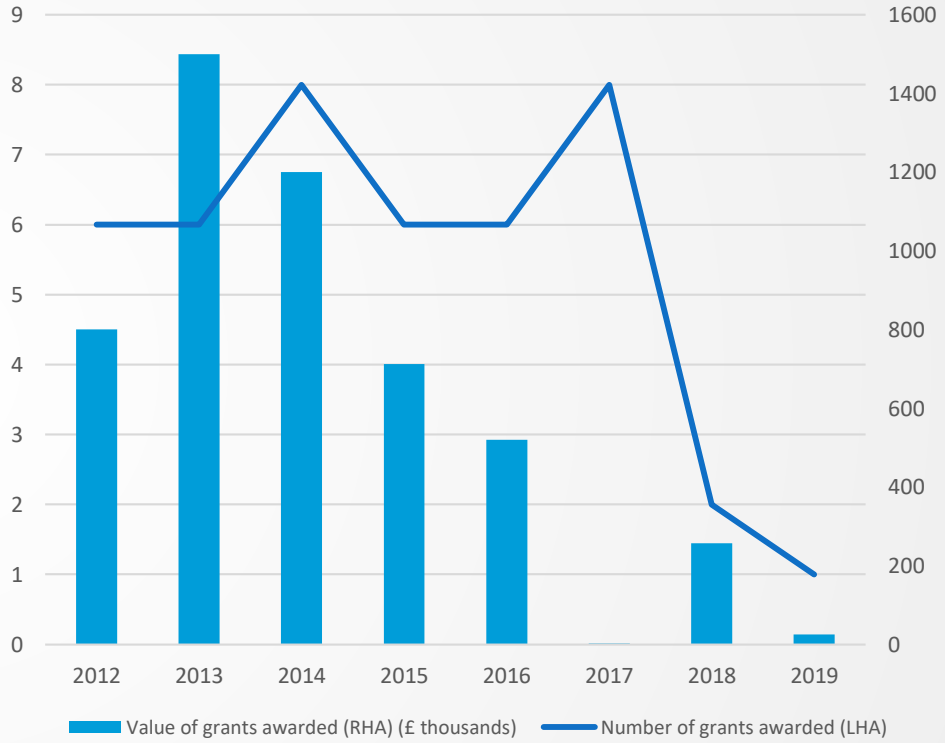
* Growth companies defined as usually active for 5+ years, substantial revenues and profit making, funding received and valuation in £ms

Fundraising and grant awards – growth companies

Fundraising – equity and debt (Dorset growth companies)



Grant awards – (Dorset growth companies)

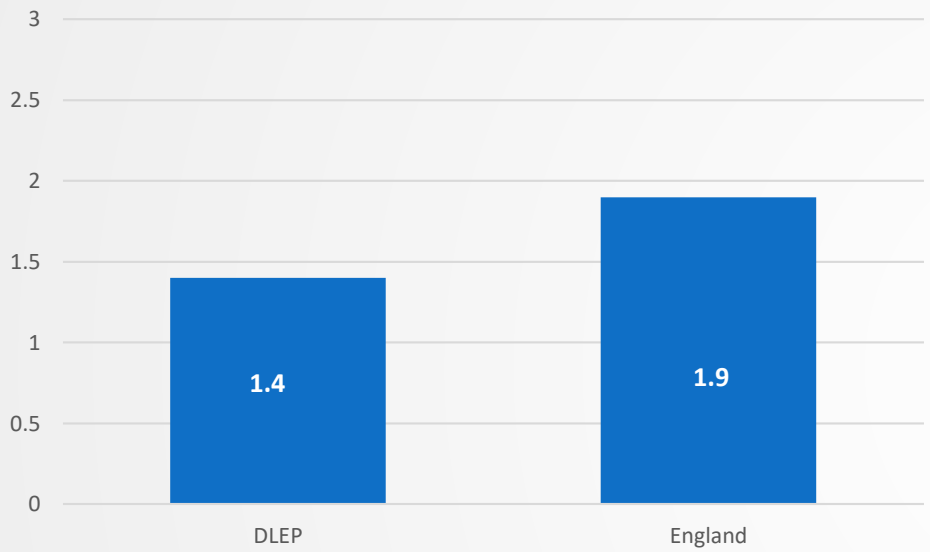


- Data indicates grant support has fallen for businesses despite growth (unclear whether demand or supply factors at play)
- Whilst total fundraising value has fallen, the number has increased – suggesting average fundraising has tended to be smaller

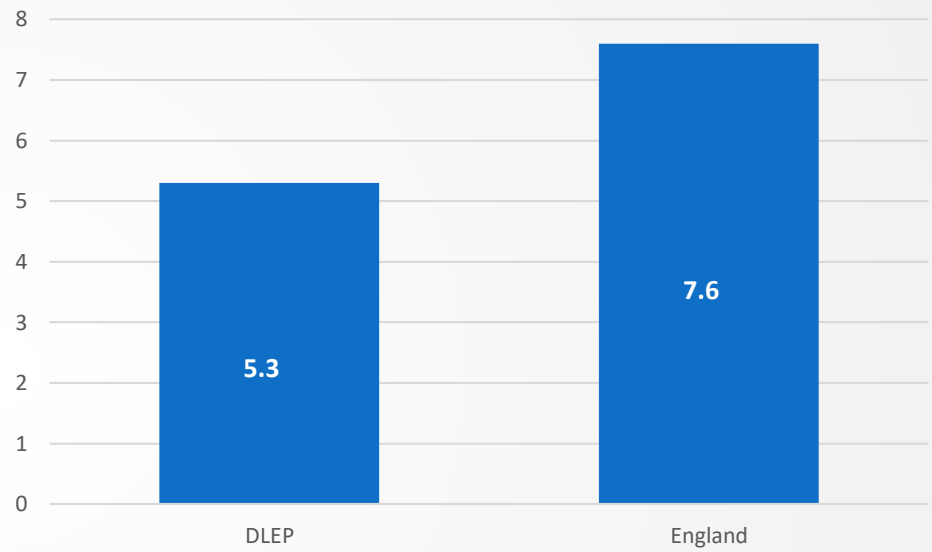
(Source: Beahurst)

Start ups

Start ups scaling <£500k to £1m in +3 years 2015-18 (%)



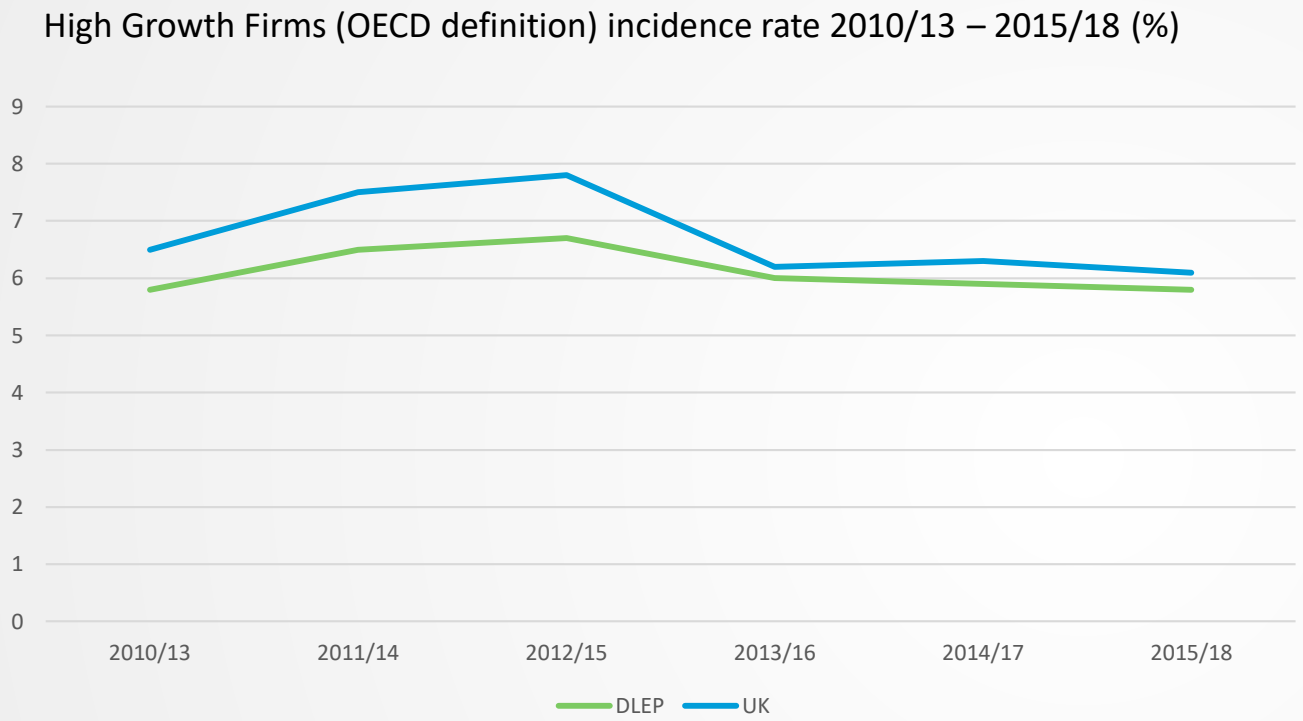
Scaling survivors £1-2m to £3m+ in 3 years 2015-18 (%)



- DLEP had 34 start-ups per 10,000 population in 2018
- 60% of 2015 DLEP start-ups survived to 2017
- 1.8% of surviving 2015 start-ups grew from <£500k to £1m+ turnover by 2017 – highlighting the difficulty of 'picking winners' from a policy perspective

(Source: UK Local Growth Dashboard – Enterprise Research Centre – Sept 2019)

Growth companies

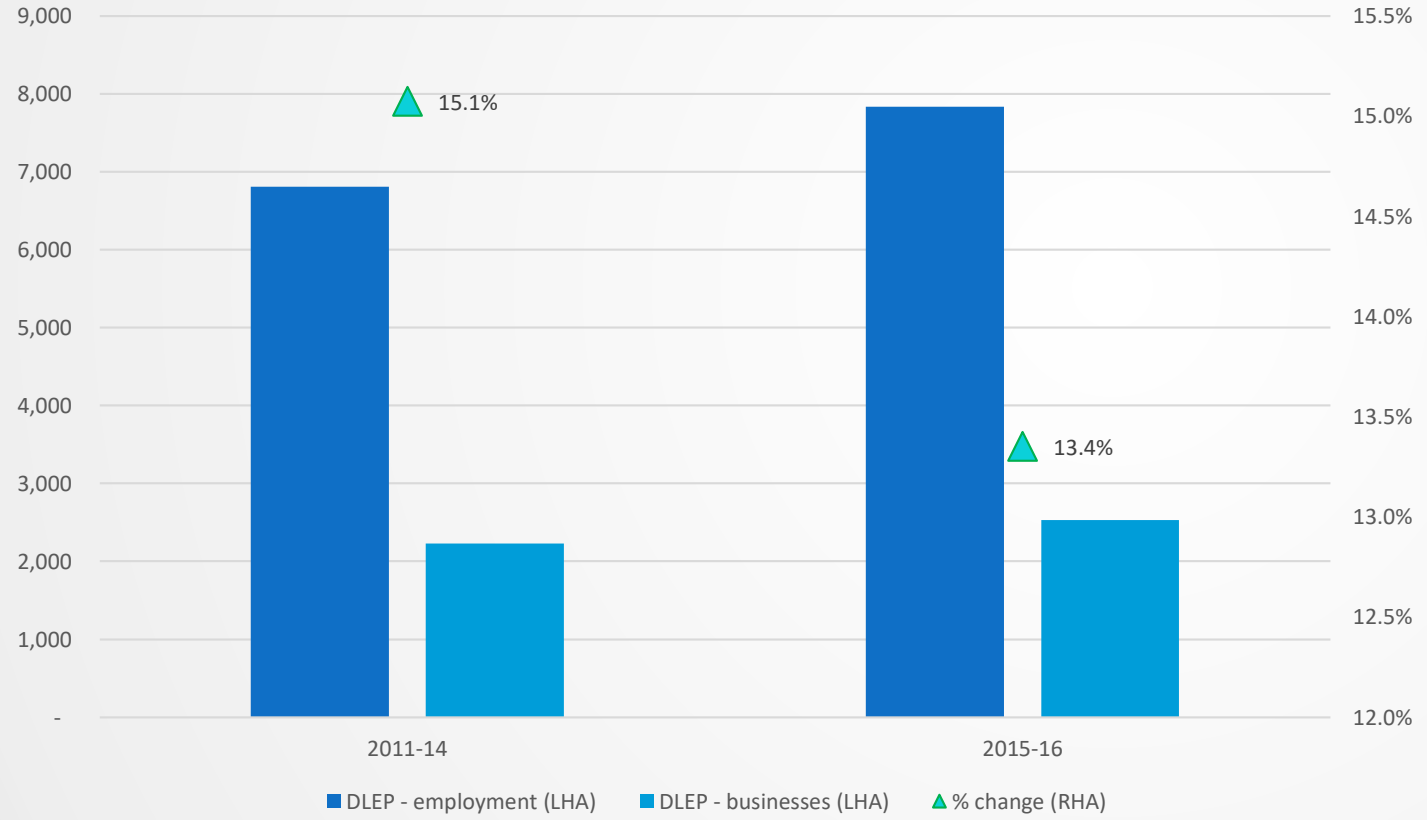


- 5.6% of high-growth firms (OECD 20% employment definition) incidence rate (2015-18)
- 14.2% of high-growth firms (OECD 10% employment definition) incidence rate (2015-18)
- 5.3% of £1-2m turnover businesses in 2015 grew to a minimum of £3m by 2018
- 8.1% of job-creating firms with positive productivity growth (2015-18) – **highlighting the dichotomy between job creation and productivity growth**

(Source: UK Local Growth Dashboard – Enterprise Research Centre – Sept 2019)

Creative and digital industries are growing strongly in terms of business base and employment

Growth in Creative Industries employment & business – Tech Nation 2018

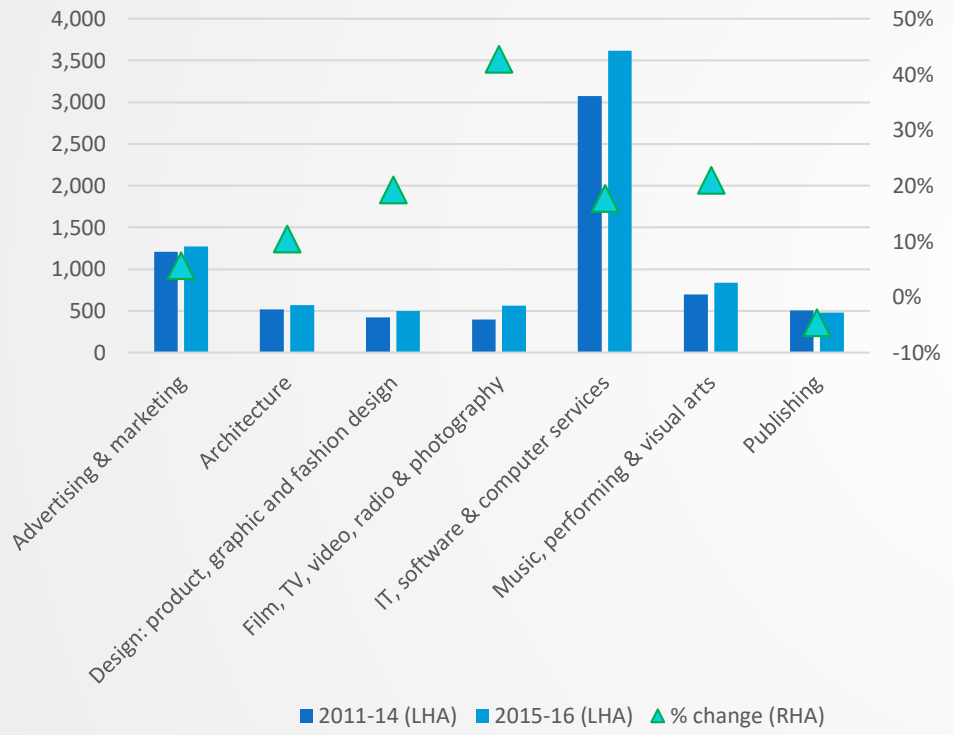


(Source: Tech Nation 2018)

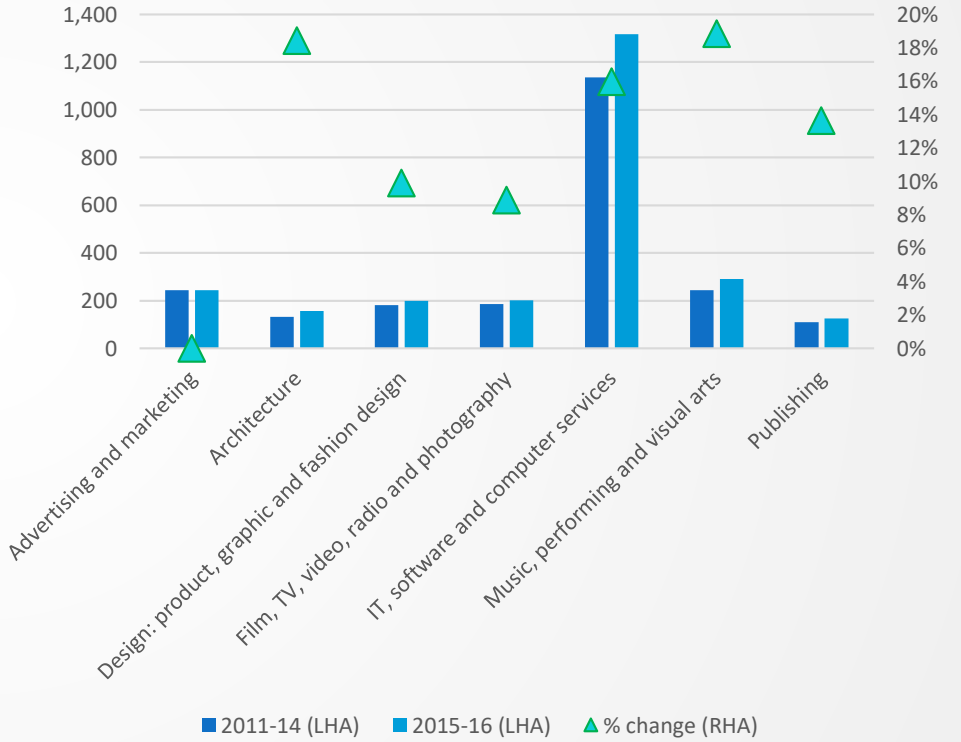
- Tech Nation analysis shows that BCP digital tech cluster one of the fast growing in the country

And different creative industry sub-sectors are contributing to overall growth

Growth in Creative Industries sectors employment – Tech Nation 2018



Growth in Creative Industries sectors business – Tech Nation 2018



(Source: Tech Nation 2018)

Competitiveness – judged to 'mid range'

UK Competitiveness Index 2019 - DLEP

	UKCI Overall	UKCI Input	UKCI Outputs	UKCI Outcomes
Ranking (out of 44)	25th	24th	29th	23rd
Score (UK = 100)	91.6	90.9	87.0	97.2

Local Authority Area	Ranking (out of 379)	Score (UK = 100)
East Dorset	179	92.7
West Dorset	190	92.3
North Dorset	240	88.4
East Dorset	179	92.7
Bournemouth	175	93.4
Poole	135	97.3
Purbeck	235	88.7
Christchurch	209	90.6
Weymouth & Portland	372	77.9

Input Factors
Economic Activity Rates Business start-ups per 1,000 inhabitants Number of businesses per 1,000 inhabitants Proportion of Working Age population with NVQ Level 4 Proportion of Knowledge-Based Businesses
Output Factors
GVA per head at current basic prices Productivity – output per hour worked Employment rates
Outcome Factors
Gross weekly pay Unemployment rates

(Source: UK Competitiveness Index 2019)

Key questions in development of LIS evidence – business environment

- Overall, DLEP businesses appear resilient – new business creation remains strong
- The 'long tail' of businesses that tend to be smaller and less growth oriented does act as a constraining factor in terms of aggregate productivity within DLEP. Whilst the majority may not wish to be growth oriented are there businesses which could be supported to grow – helping to shift productivity performance
- The evidence suggests that the number of growth companies/scale-ups are increasing in DLEP – multi-sector – although these still represent only small proportion of business stock. How to best support potential scale-ups (risk/reward from public support perspective)?
- Discussions around sector deals e.g. health are continuing in DLEP
- Clusters of activities around several sectors including digital, medical technologies, agri-tech. Several 'traditional' industries maintain significant presence e.g. manufacturing and engineering
- Partners have identified some key strengths and capabilities

FOUNDATIONS OF PRODUCTIVITY:

PLACE

Place: summary

- Data suggests that there is an inequality in socioeconomic outcomes across the DLEP area
- In broad terms, areas of most marked relative deprivation (although not exclusively) exists in Bournemouth and Weymouth & Portland – displaying characteristics similar to many seaside towns
- The latter has some of the lowest levels of social mobility in the country
- However, the area also has some of the least deprived areas – highlighting the contrast
- Key policy issue is how to promote inclusive growth, whilst not losing the focus on productivity within the LIS
- Home ownership amongst the young is the lowest in the country – impacts on labour mobility?
- Data suggests that overall the DLEP area is 'wealthier' than income measurements suggest – partly reflective of demographic characteristics
- Evidence suggests that consideration of displacement is a key issue when considering specific area-based interventions – Enterprise Zones being cited as an example
- As expected, the influence of BCP for employment opportunities is strong for surrounding areas – influence weakens as distance increases

Area-based initiatives – what the evidence suggests

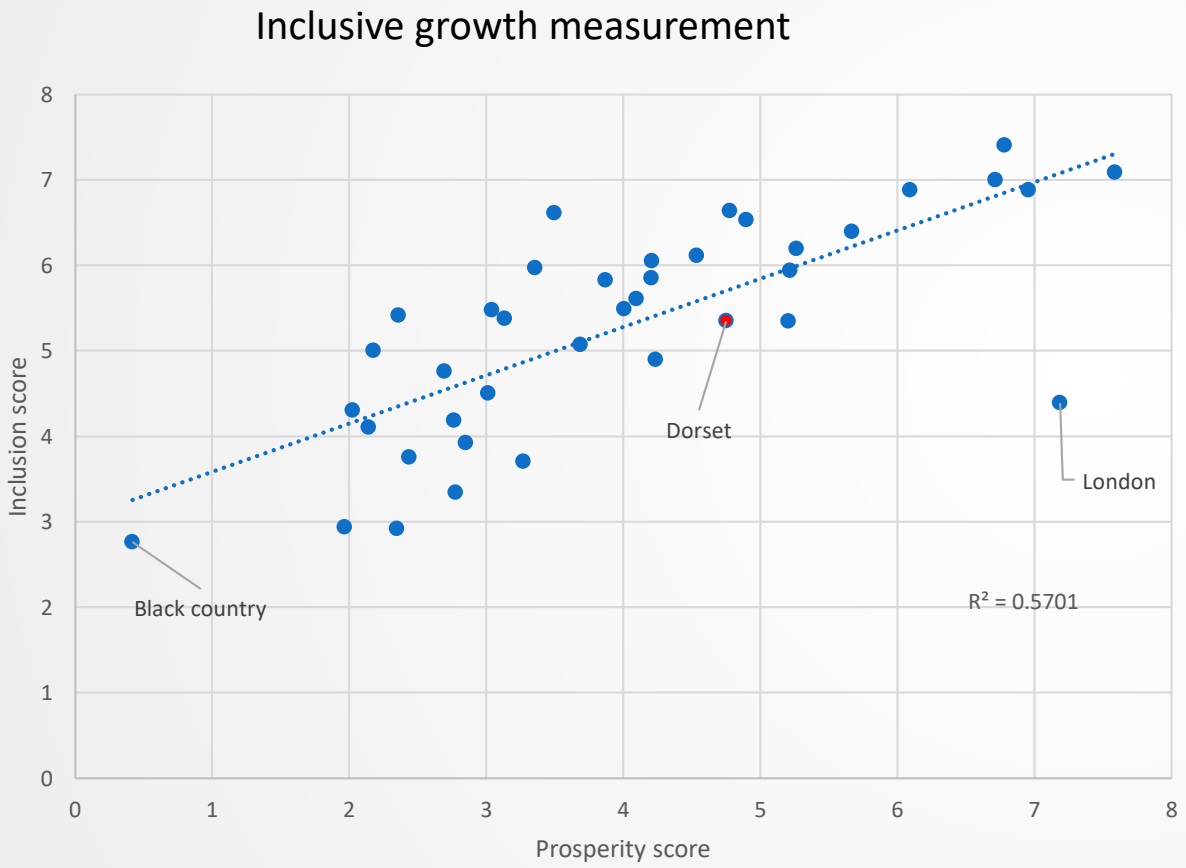
- Decision makers need to take concerns over displacement in locally focused initiatives seriously. However, even if displacement effects are strong, such focused interventions may play a role in helping concentrate local employment from a number of dispersed sites
- There are implications for public service provision of more concentrated employment. For example, **concentrating employment on a smaller number of sites may help reduce costs of infrastructure provision such as transport, broadband and other services to business**
- For specific renewal projects - overall, the evidence suggests that the measurable economic impacts on local economies (in terms of employment, wages or deprivation) tend not to be large. In contrast, projects may have a positive impact on property prices

<u>Policy questions from evaluation evidence:</u>

- Objectives of any area based policy must be very clearly defined, and the more specifically they can be targeted in terms of outcomes the better
- Progress must be made in the evaluation of geographically focused interventions e.g. Enterprise Zones if confidence is provided that they are providing good value for money

(Source: What Works Centre for Local Economic Growth – evidence review)

Dorset is relatively successful in creating inclusive growth…. but improvement to be made



(Source: Inclusive growth monitor 2017)

	Labour Market	Living Costs	Income	Total
Inclusion dimension				
Prosperity dimension				

- Dorset in middle two quartiles (amber) for measurements of inclusion and prosperity – part from living costs where it is in the bottom quartile of LEPs
- In broad terms there is a positive correlation between prosperity and inclusion – although certainly not linear and many would argue the relationship has broken

Thriving Places Index – some success stories

			Bournemouth	Poole	Dorset
Local condition			4.75	5.48	5.98
	Place and environment		5.37	5.66	5.87
		Local environment	6.9	5.96	6.59
		Transport	5.19	5.14	4.38
		Safety	4.89	5.86	7.17
		Housing	4.51	5.68	5.35
	Mental and physical health		4.68	5.4	6.13
		Healthy and risky behaviours	5.5	5.01	6.48
		Overall health status	4.35	5.64	5.44
		Mortality and life expectancy	4.58	6.02	6.79
		Mental health	4.31	4.91	5.81
	Education and learning		5.73	5.97	5.57
		Adult education	5.48	5.48	5.84
		Children's education	5.99	6.46	5.3
	Work and local economy		4.76	5.5	5.87
		Employment	5.88	5.56	6.47
		Good jobs	4.94	6.56	5.75
		Basic needs	4.88	5.48	5.92
		Local business	3.34	4.43	5.34
	People and community		3.21	4.85	6.43
		Participation	2.75	3.66	5.51
		Culture	5.1	5.55	7.83
		Community cohesion	1.79	5.35	5.96
Sustainability			6.02	5.4	5.75
		C02 emissions	5.64	5.36	5.06
		Household recycling	5.93	6.04	7.75
		Energy consumption per capita	6.5	4.79	4.43
Equality			5.81	6.41	6.09
		Health inequality	5.36	6.74	6.26
		Income inequality	5.77	5.95	5.71
		Wellbeing inequality	6.3	6.55	6.3

(Source: Thriving Places Index 2018)

	Bournemouth	Poole	Dorset
Equality	5.81	6.41	6.09
Local conditions	4.75	5.48	5.98
Sustainability	6.02	5.4	5.75

Scores less than 3.5
Scores between 3.5 and 4.5
Scores between 4.5 and 5.5
Scores between 5.5 and 6.5
Scores greater than 6.5

- Bournemouth performs well on local environment and sustainability (unusually for an urban area)
- DLEP area performs well on sustainability (highlighting high environmental quality) and equality

Bournemouth, Christchurch & Poole – comparison against urban areas

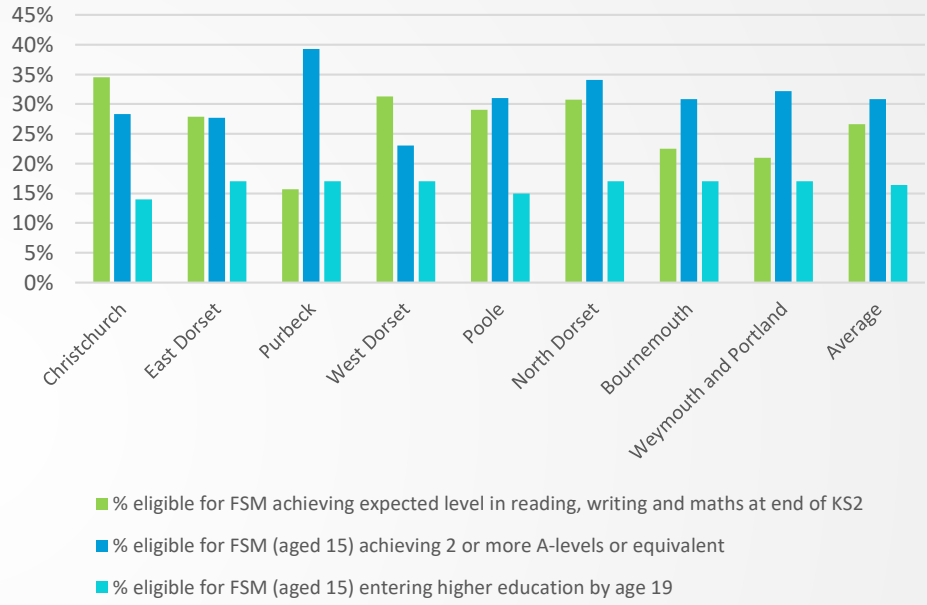
Indicators – urban areas

	Average (63 urban areas in UK)	Bournemouth, Christchurch & Poole
CO2 emissions (tonnes) per capita - 2016	5.0	3.8
Business churn rate (% business stock – 2017)	1.27	1.78
Exports per job (£) – 2017	14,109	10,280
Services exports per job (£) - 2017	5,494	4,930
Inequality (as measured by Gini coefficient) – 2016	0.4	0.4
Youth claimant count (%) – 2019	2.9	2.0
Housing Affordability Ratio - 2018	8.4	12.4
Patent applications (per 100,000 population) – 2017	25.0	15.7
Knowledge intensive business services (% businesses) – 2017	12.3	15.4
Ratio of private to public sector employment - 2017	2.6	2.9
Working age population with no formal qualification – 2017	8.3	6.0

(Source: Centre for Cities)

Social Mobility

Local Authority Area	Rank (out of 324)
Christchurch	127
East Dorset	147
Purbeck	175
West Dorset	187
Poole	198
North Dorset	216
Bournemouth	245
Weymouth and Portland	322



- Weymouth and Portland clearly identified as one of the worst areas of the UK for social mobility
- Only one-third of children eligible for free school meals reach the expected level of achievement at KS2
- Only 1 in 6 of children eligible for free school meals (aged 15) enter higher education
- Four Lower Super Output Areas (LSOAs) are within the 10% most deprived in the country – all in Weymouth & Portland

(Source: Social Mobility Index 2017)

Bournemouth – expected to keep pace in slower growth context

'Nowcast' of economic performance – nominal GVA and employment growth (Bournemouth)

Growth in annual GVA		
Ranking (out of 46)	GVA Q4 2018 (£mn) (annualised, constant 2013 prices)	Growth (YoY)
24	4,600	1.6%

Growth in employment		
Ranking (out of 46)	Employment level, Q4 2018	Growth (YoY)
9	95,900	1.5%

Near-term projection of economic performance – nominal GVA and employment growth (Bournemouth)

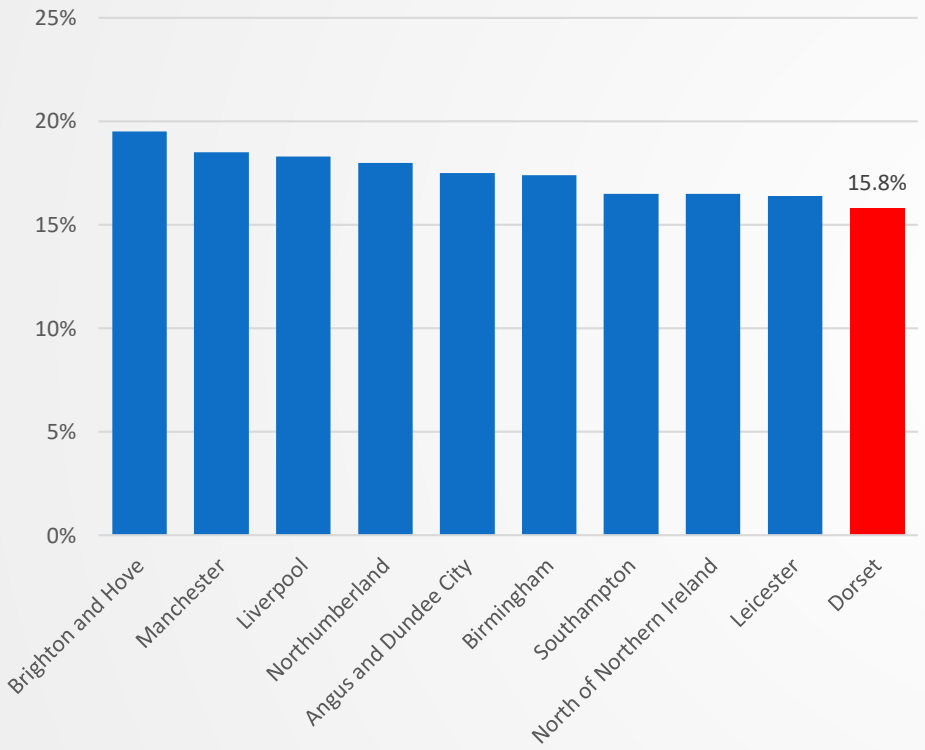
Projected growth in annual GVA		
Ranking (out of 46)	GVA Q4 2020 (£mn) (annualised, constant 2013 prices)	Growth (YoY)
11	4,800	1.6%

Projected growth in employment		
Ranking (out of 46)	Employment level, Q4 2018	Growth (YoY)
16	98,400	1.3%

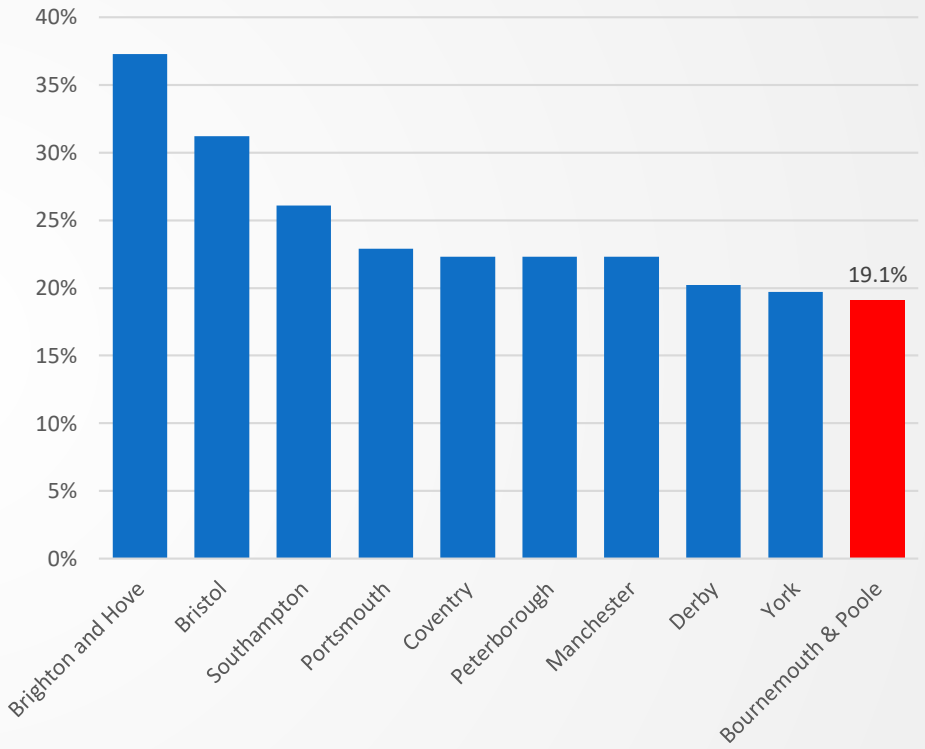
(Source: Irwin Mitchell – UK Powerhouse Report – May 2019)

Dorset has the lowest home ownership in the young

Home ownership rate, local areas, 25-34 year olds, 2015-2018, 3yr average



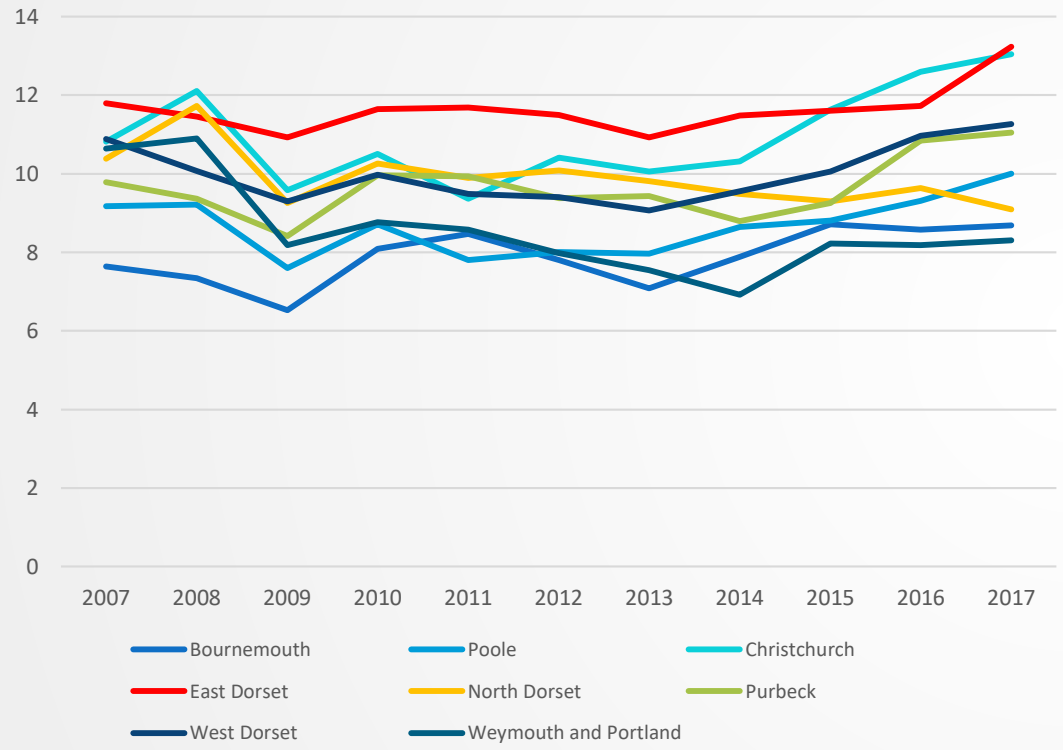
Sharing private renters rate, local areas, 25-34 year olds, 2015-2018, 3yr average



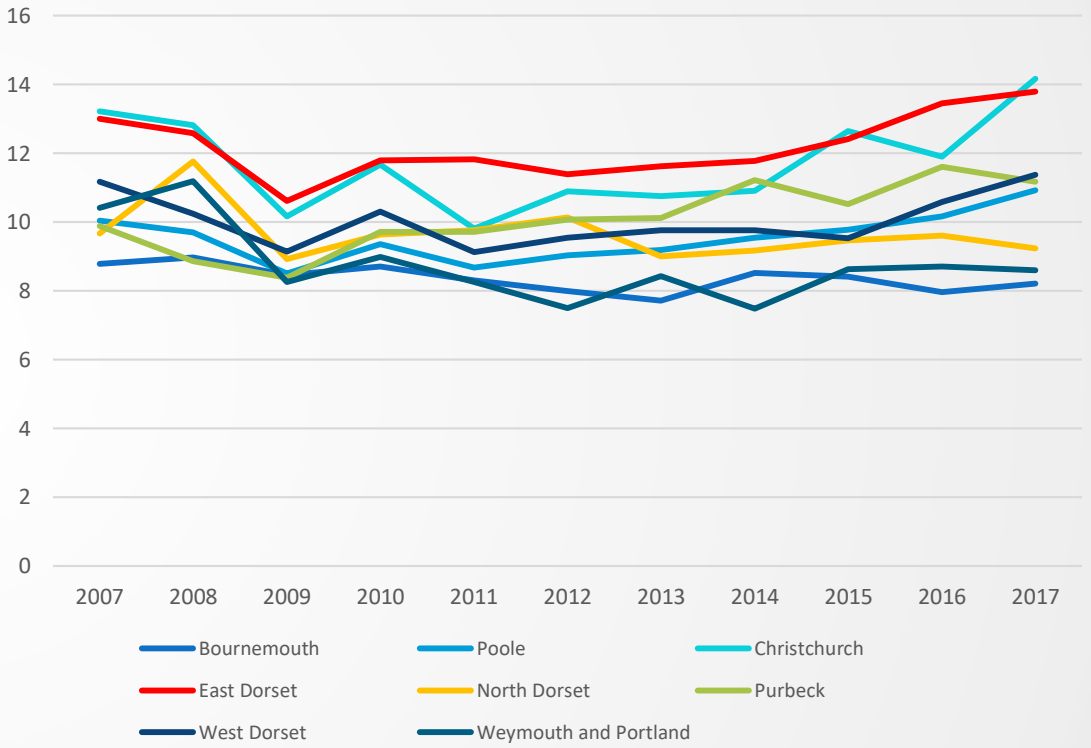
(Source: Resolution Foundation)

Housing affordability continues to worsen

Ratio of average (median) house price to median gross annual workplace-based earnings



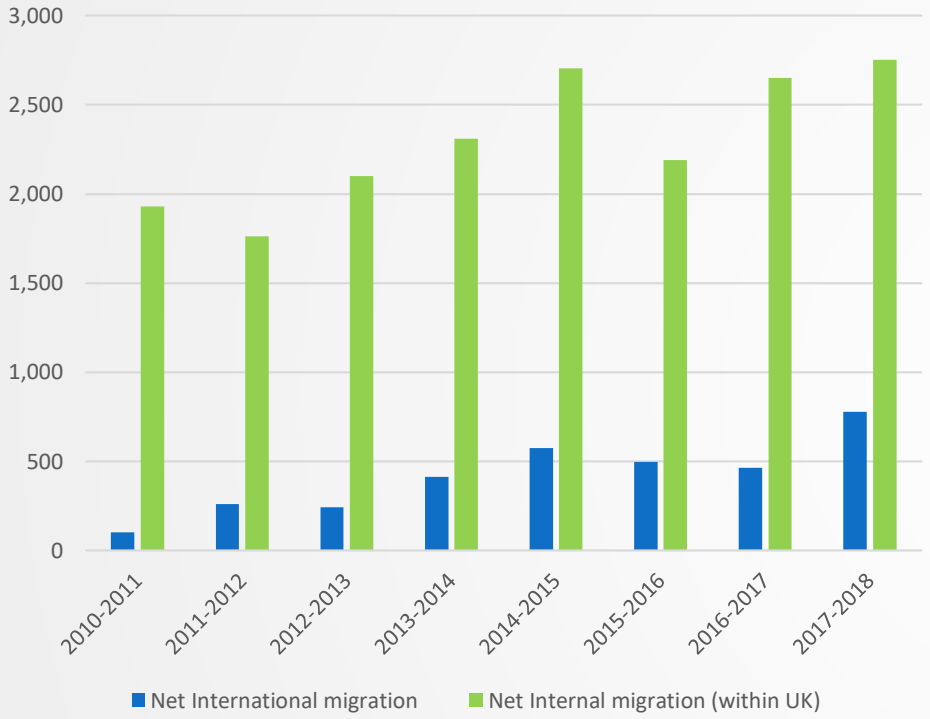
Ratio of lower quartile house price to lower quartile gross annual (where available) workplace-based earnings



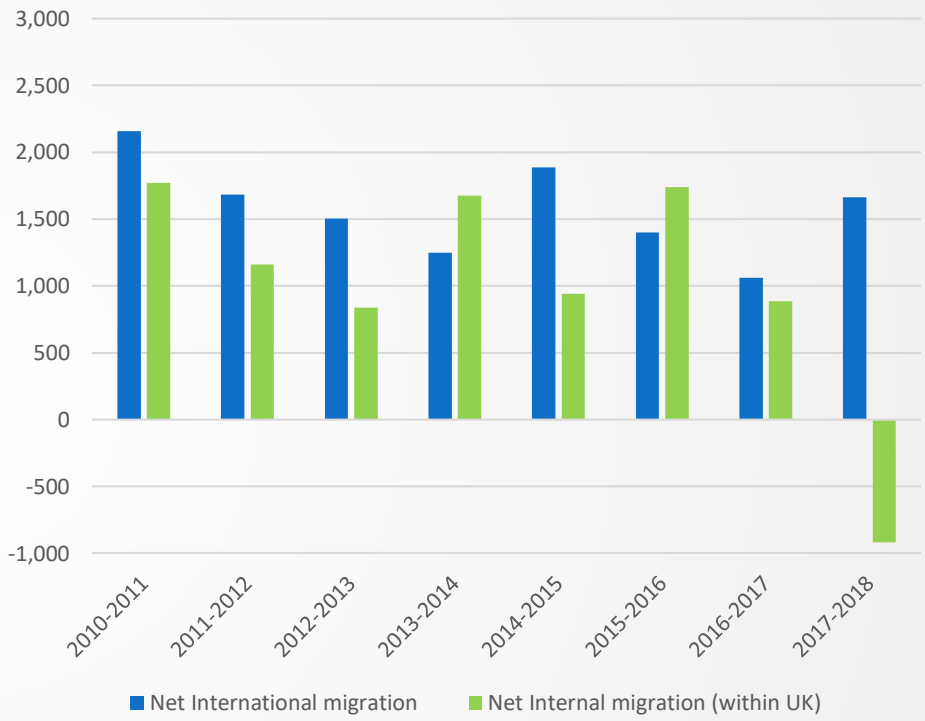
(Source: ONS House Price Statistics and Annual Survey of Hours and Earnings)

Area continues to attract net inward migration

Short-term migration flows - Dorset



Short-term migration flows - BCP



- Net inward migration into both Dorset and BCP remain positive
- However, marked difference in make-up – with internal migration (within UK) dominant factor in Dorset and international migration (inc. students) for BCP
- Despite impending Brexit – net international migration remains positive – circa 2,000 per annum

(Source: Local area migration indicators - ONS)

Relative deprivation

- Ten areas (out of 219) in Dorset Council area within the top 20% most deprived nationally for multiple deprivation - nine of these are within Weymouth & Portland
- Fifteen areas in BCP are within the top 20% most deprived nationally
- 7 areas in Dorset Council area are within the top 20% nationally for income deprivation
- The gap in life expectancy between the most deprived and least deprived areas of the former Dorset County Council area is 6 years and 5.2 years for women
- The IMD highlights the gap between more poorer and more affluent areas (as shown below):

BCP (out of total of 233 LSOAs in BCP)

LSOAs in **decile 1** the **10% most deprived** areas in England

LSOAs in **decile 2** the **20% most deprived** areas in England

LSOAs in **decile 10** the **10% least deprived** areas in England

Dorset Council (out of total of 219 LSOAs in Dorset)

LSOAs in **decile 1** the **10% most deprived** areas in England

LSOAs in **decile 2** the **20% most deprived** areas in England

LSOAs in **decile 10** the **10% least deprived** areas in England

(Source: Index of Multiple Deprivation 2015)

Town-based characteristics

DLEP towns by workplace (job density) and residential (relative income deprivation)

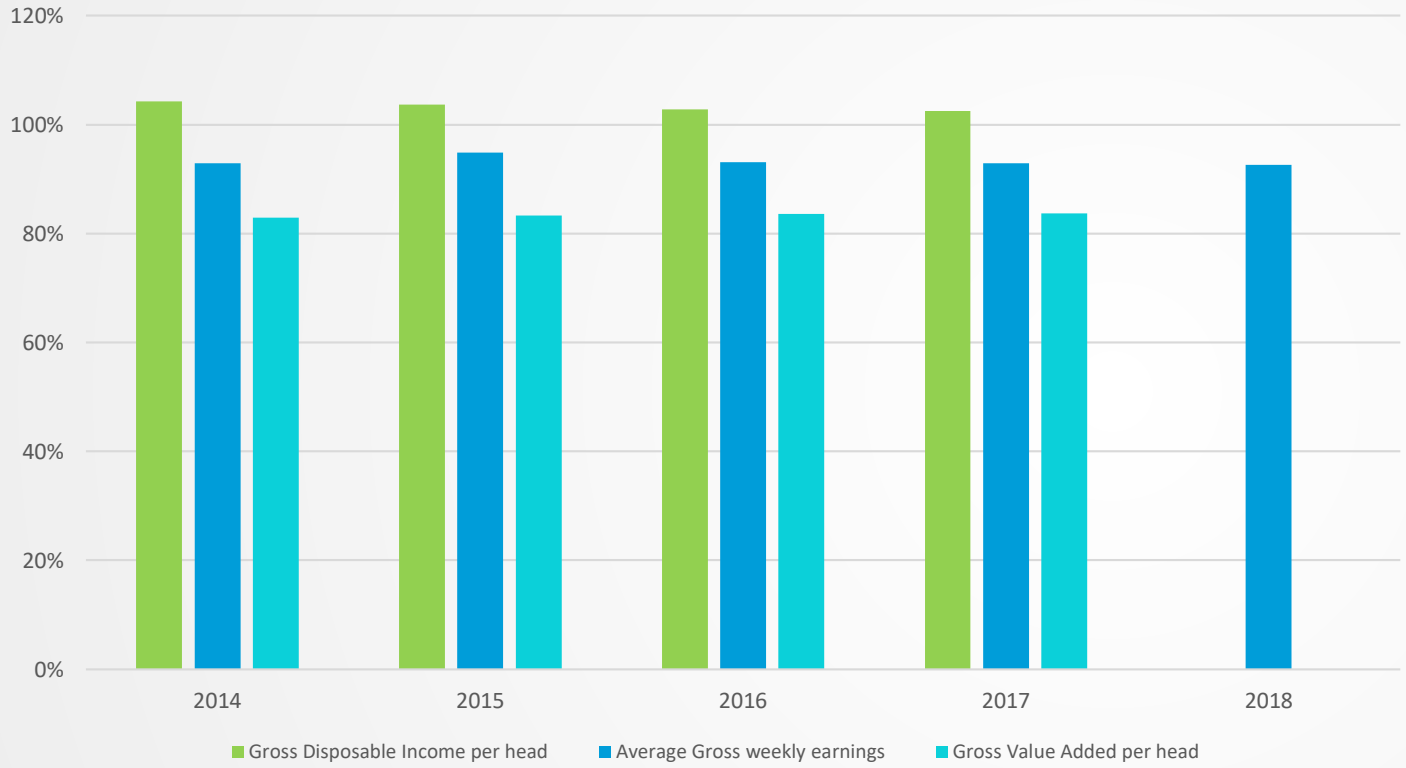
Town	Definition	Job Density (%)	Income deprivation decile (1 = highest income deprivation)
Dorchester	Mid Deprivation Working	177.8	6
Weymouth	Higher Deprivation Residential	53.9	4
Bridport	Mid Deprivation Working	79.9	5
Wareham	Mid Deprivation Working	89.2	6
Poole	Mid Deprivation Working	96.6	6
Bournemouth	Higher Deprivation Working	81.2	4
Ferndown	Lower Deprivation Working	115.1	8
Christchurch	Lower Deprivation Working	75.6	7
Merley	Lower Deprivation Residential	50.6	10
Swanage	Lower Deprivation Mixed	61.1	7
Blandford Forum	Mid Deprivation Working	71.0	6
Sherborne	Mid Deprivation Working	101.5	6
Shaftesbury	Mid Deprivation Working	75.7	6
Gillingham	Lower Deprivation Mixed	60.3	8

Definition
Lower Deprivation Working = Towns have a high job density, reflecting a high level of local jobs relative to working-age population, and also low levels of income deprivation
Higher Deprivation Towns = Towns with a high job density, but with relatively high levels of income deprivation
Higher Deprivation Residential = Towns where job density is low and the levels of income deprivation are relatively high
Lower Deprivation Residential = Towns where income deprivation is relatively low, but with a low job density

(Source: Understanding towns in England - ONS

Relative disposable income higher than earnings

Comparisons of measurements (UK=100)

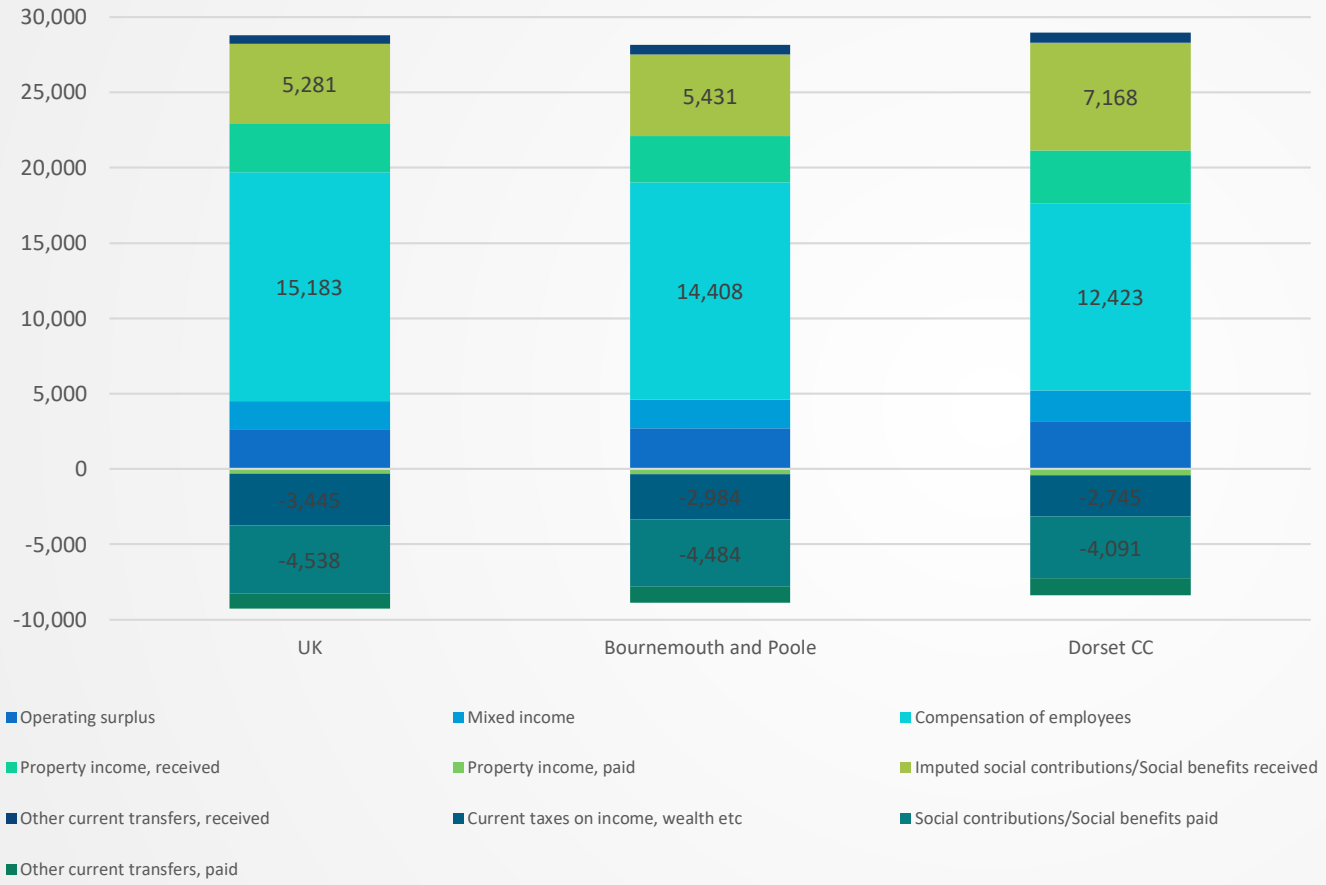


(Source: Annual Survey of Hours and Earnings, Sub-regional productivity and GDHI – ONS
* - time profile showing the different availability of datasets)

- DLEP area exceeds national average in terms of disposable household income
- In terms of earnings (median), it is broadly 93% of national average
- As shown previously, it is 82% in terms of productivity measure (GVA per hour)

Comparators of income – composition of household income

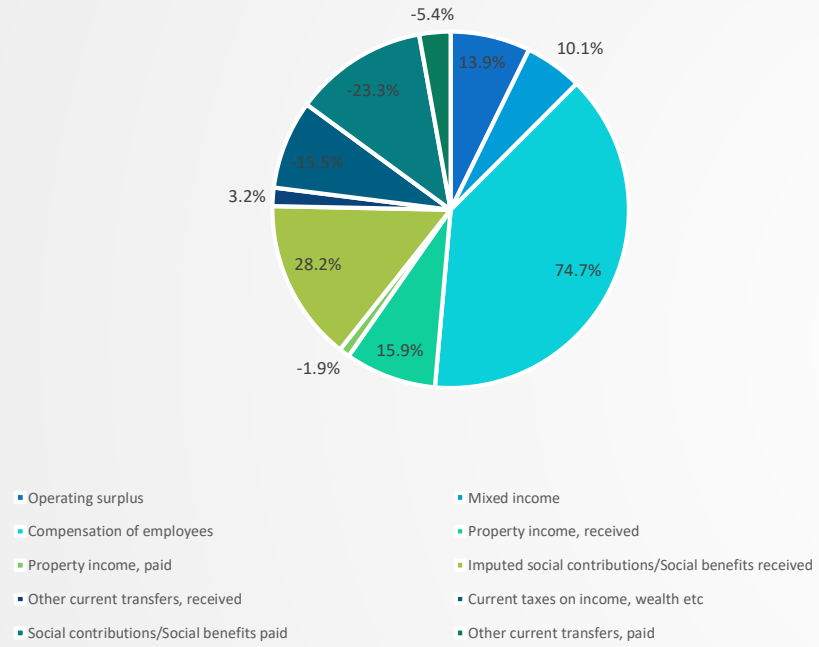
Gross Domestic Household Income by source



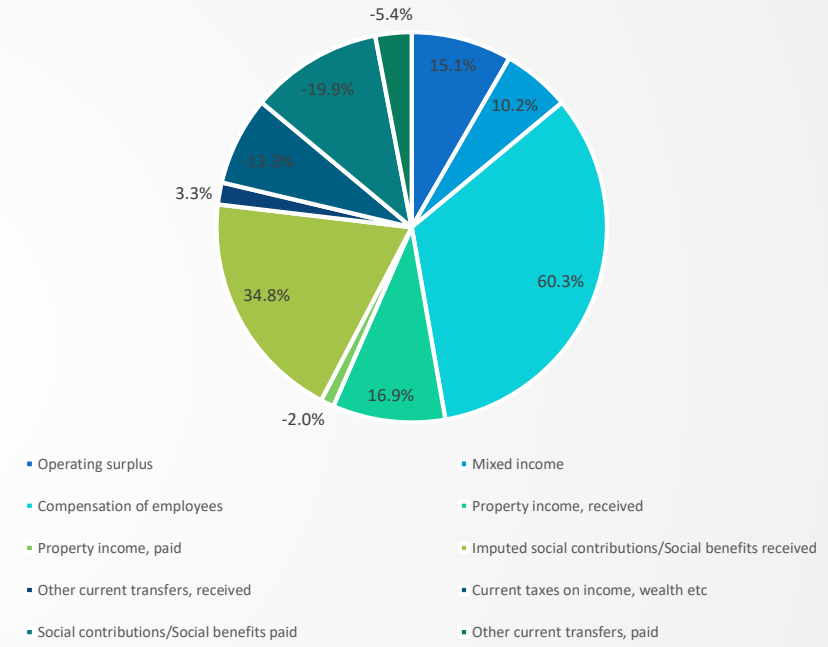
(Source: Gross Domestic Household Income - ONS)

Comparators of income – composition of household income

GDHI by source – Bournemouth and Poole (% contribution)



GDHI by source – Dorset CC (% contribution)



- Whilst 75% of disposable income in Bournemouth and Poole is from compensation of employees (earnings) it only constitutes 60% in Dorset CC area
- Conversely 35% is contributed by social contributions (including State pension) in Dorset

(Source: Gross Domestic Household Income - ONS)

Natural Capital

- Many of the areas of high environmental quality are under pressure, although the benefit of environmental protection can be shown (as below table)
- However, proportion in poor state raises questions about the state of the environment which doesn't have same level of protection
- Visual quality recognised in 50% of land area being classified as AONB

Wildlife site condition (March 2014)		
Sites of Special Scientific Interest	Favourable	39%
	Unfavourable recovering	48%
	Unfavourable no change or declining/destroyed	13%
Sites of Nature Conservation Interest	Good maintained/improving	43%
	Fair maintained/improving	14%
	Poor or declining	15%
	Unknown	28%

(Source: Natural Value Report – Dorset Local Nature Partnership)

Commuting flows – the 'pull' of BCP urban area

Commuting flows – origin-destination of workforce

	Flows to BCP	Flows from BCP	Net outflow	% of workforce working in BCP	% BCP workforce working in LA
East Dorset	11,169	8,519	(2,650)	36.5%	5.8%
North Dorset	1,952	1,019	(933)	7.8%	0.7%
Purbeck	5,204	3,098	(2,106)	31.7%	2.1%
Weymouth & Portland	614	203	(411)	2.5%	0.1%
Total	18,939	12,839	(6,100)	19.6%	8.8%

- Census data shows a net inflow into BCP from elsewhere in DLEP of circa 6,100
- For some areas (East Dorset & Purbeck) circa one-third of workforce work in BCP. For other areas more distant the relationship is less strong
- Overall, 1-in-5 of the workforce in surrounding areas (just including Dorset) work in BCP
- These commuting flows indicate the importance of the BCP economy for the income/wealth of the immediate surrounding areas (East Dorset & Purbeck), weaker relationship in North Dorset and Weymouth & Portland

(Source: 2011 Census - origin-destination data)

Balancing population and employment growth

Dorset towns (built-up areas) – population and employment growth

Town	Population growth (2009-17) (%)	Employment growth – 2009-17) (%)	Jobs density
Blandford Forum	9.3	1.3	0.71
Bournemouth	11.5	14.9	0.81
Bridport	-0.3	2.9	0.80
Dorchester	11.3	14.7	1.78
Gillingham	3.7	5.5	0.60
Poole	4.2	3.9	0.97
Shaftesbury	24.1	8.4	0.76
Wareham	8.4	-34.2	0.89
Weymouth	1.6	-16.9	0.54

(Source: Understanding towns in England and Wales)

- ONS data shows fall in number of jobs in Weymouth & Portland and low job density – indicating unemployment or out-commuting
- Strong population growth in centres such as Dorchester and Shaftesbury – but with differing employment growth
- Dorchester clearly plays an important role in rural Dorset as an employment location (job density significantly greater than 1 (number of jobs as % of resident working age population)

Key questions in development of LIS evidence – place

- Clear spatial differences in socioeconomic outcomes across the DLEP area – holds some of the wealthiest areas alongside areas of multiple deprivation – some concentration around Weymouth & Portland and pockets within the urban area
- Inequality (lack of social mobility) entrenched in some areas – particularly in some coastal communities within the area
- Housing affordability amongst some of the highest in the country – social and economic implications
- The development of policies that support inclusive growth important – key question is how this sits alongside the productivity focus in the Industrial Strategy
- Skills differentials appear an important driver of inequality

GRAND CHALLENGES

AI & Data Economy

We will put the UK at the forefront of the artificial intelligence and data revolution

Clean Growth

We will maximise the advantages for UK industry from the global shift to clean growth

Future of Mobility

We will become a world leader in the way people, goods and services move

Ageing Society

We will harness the power of innovation to help meet the needs of an ageing society

GRAND CHALLENGES:

AGEING SOCIETY

An ageing society – unique opportunities

"The large and growing health and social care sector supporting BCP's older population provides a great opportunity to test innovative health care solutions. There are a limited number of health innovation companies in the area and investment into providing space for similar companies could help build this into a USP, particularly given the strengths of Bournemouth University in the health and social sciences sector."

(Source: The New Urban Dorset - Savills Research - 2018)

An ageing society – a constraint on growth?

Recent research has estimated that changes in the age profile (ageing) will reduce the medium-term trend for UK economic growth by circa 0.4 percentage points per annum, increasing over the longer-term. Given that the DLEP area is more aged – could this impact be greater?

(Source: Medium-term implications of changing demographic structures for the macro-economy – Aksoy, Basso and Smith – June 2017)

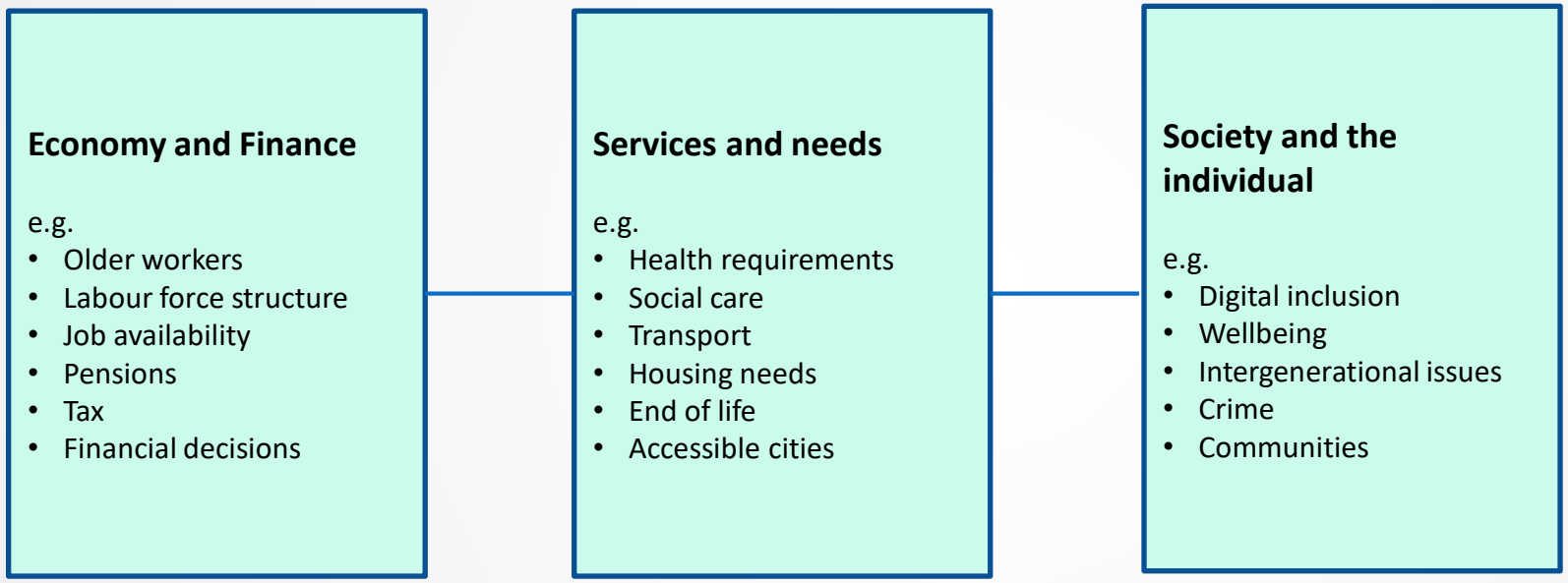
Ageing and its implications

- An additional 8.6mn UK residents projected to be aged 65 and over by 2066 – almost the size of London today
- Population aged 65+ will grow by around 50% in both urban and in rural areas between 2016 and 2039
- However, rural areas will see negligible growth in the population aged under 65, while it increases by 8% in urban areas
- The effect of this is an increase in the ratio of older to younger people (dependency ratio), particularly in rural areas
- Increases in 'healthy life' expectancy has not kept pace with increases in life expectancy

- Whilst this will present highly significant social issues – it also represents a 'challenge' and 'opportunity' from a supply-side perspective. Potential to build-on developing specialism and expertise in DLEP

Ageing and its implications

Ageing is a cross-cutting issue with implications for multiple policy areas



(Source: Living Longer – How our population is changing and why it matters - ONS)

Health innovations – research expertise

- Bournemouth University has a number of notable areas of research excellence contributing to innovation in healthcare agenda, including:
  - The National Centre for Computer Animation – drawing on animation to develop new techniques for surgeons
  - The Department of Creative Technology developing training simulations and virtual environments imperative to future training
- Centre for Intellectual Property Policy and Management
  - Especially important for developing IP through digital technologies/issues
- Data Sciences has a number of strong areas such as the production of an award winning epidural simulator and strengths related to 5g and assistive technology including:
  - Human Computer Interaction Research Group
  - Machine Intelligence Group
  - Smart Technology Research Group
  - Cyber Security Research Group
- Ageing and Dementia Research Centre: https://research.bournemouth.ac.uk/centre/ageing-dementia-research-centre/ interdisciplinary research tackling many of the challenges presented by ageing and dementia developing innovative social care solutions. Creative programme of public engagement with wide extensive beneficiary groups
- Orthopaedic Research Institute have worked this the health care industry to enhance technologies in fields such as hip replacement and clinical engineering

(Source: Bournemouth University)

Health innovations – research expertise

- Bournemouth University has utilised its HEIF allocation pump prime innovation in health and social care. Recent projects include:

- SHIVA - developing novel techniques to enable those with disabilities to take part in the visual arts
- FACETS – a group based fatigue management programme for MS
- FoodSMART - provided a forerunner programme to allow consumers to make healthy dietary choices
- Neuropathy device - patent to test neural sensitivity
- Mobile app to reduce blood pressure - gives users feedback to guide breathing to a lower, personalised optimal frequency
- Empowering service users through psychiatric genetic counselling - helps to translate the understanding of genetics to psychiatric disorders
- Centre for Leadership, Impact and Management, Bournemouth (CLiMB) - provides leadership skills and training to grow capability in the health and social services

(Source: Bournemouth University)

Health innovations – collaborative approach

- Recent investment by the National Institute for Health Research to establish Applied Research Collaboration (ARC) Wessex – collaboration between Bournemouth University, NHS Trusts and local authorities. Leading-edge applied health research focusing on some of the biggest health challenges, including:

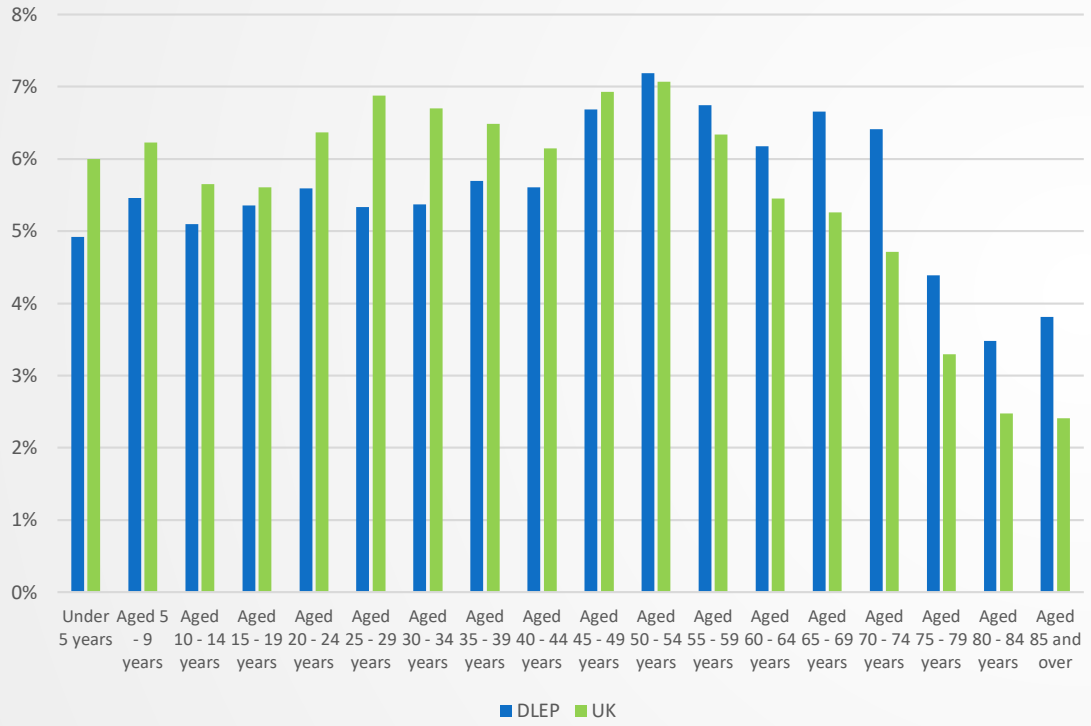
  - Ageing and dementia
  - Long-term conditions
  - Healthy communities
  - Health systems and workforce

- Nature prescription being taken forward by local health partners – linking into environmental quality e.g. Natural Choices

(Source: Bournemouth University and Local Nature Partnership)

Dorset LEP is a more aged area

Age profile versus national average (5 year age groups)



(Source: 2017 based Trend led population projections - ONS)

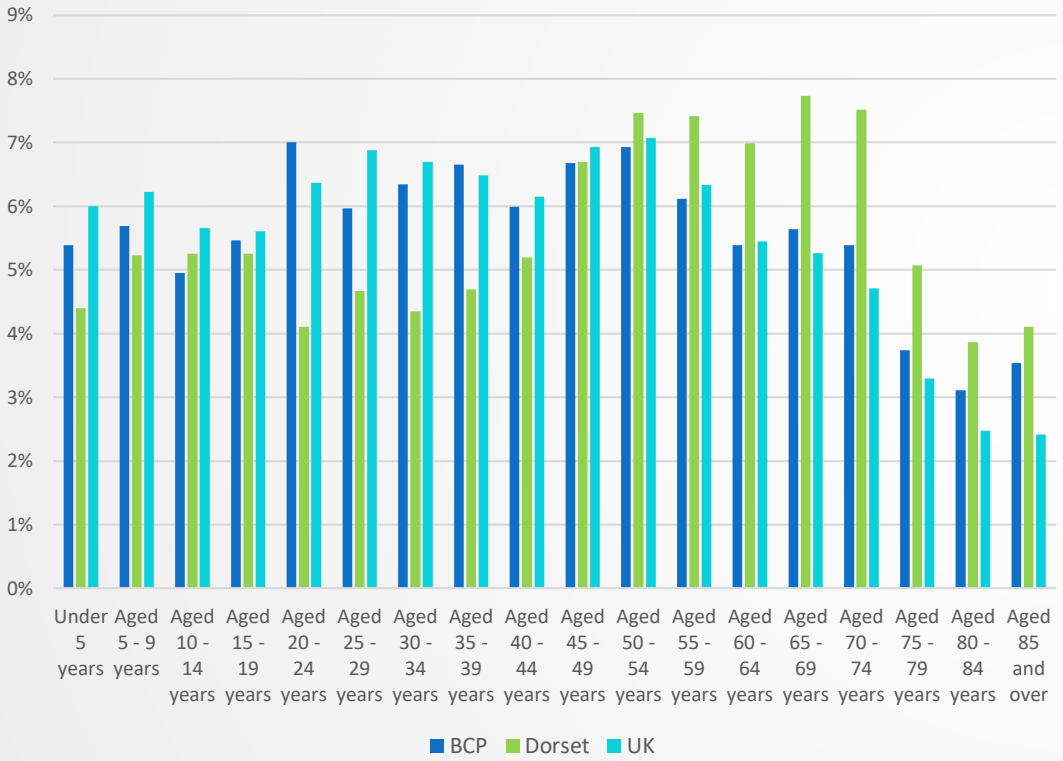
Age profile versus national average (broad ages)

	DLEP	UK
Under 15 years	15.5%	17.9%
15 – 29 years	16.3%	18.9%
30 – 49 years	23.4%	26.3%
50 – 64 years	20.1%	18.9%
65+ years	24.7%	18.2%

- 1-in-4 of DLEP population is aged 65+ - at a national level it is less than 1-in-5

Dorset Council area more aged than elsewhere (BCP and national)

Age profile versus national average (5 year age groups)



(Source: 2017 based Trend led population projections - ONS)

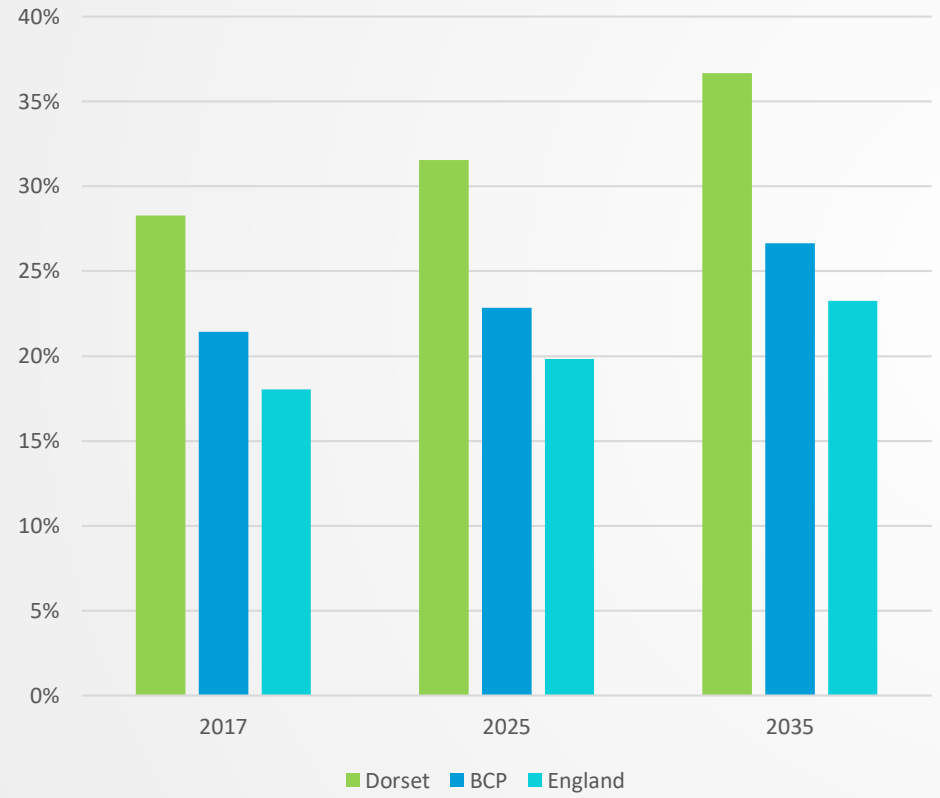
Age profile versus national average (broad ages)

	BCP	Dorset	UK
Under 15 years	16.0%	14.9%	17.9%
15 – 29 years	18.4%	14.0%	18.9%
30 – 49 years	25.7%	20.9%	26.3%
50 – 64 years	18.4%	21.9%	18.9%
65+ years	21.4%	28.3%	18.2%

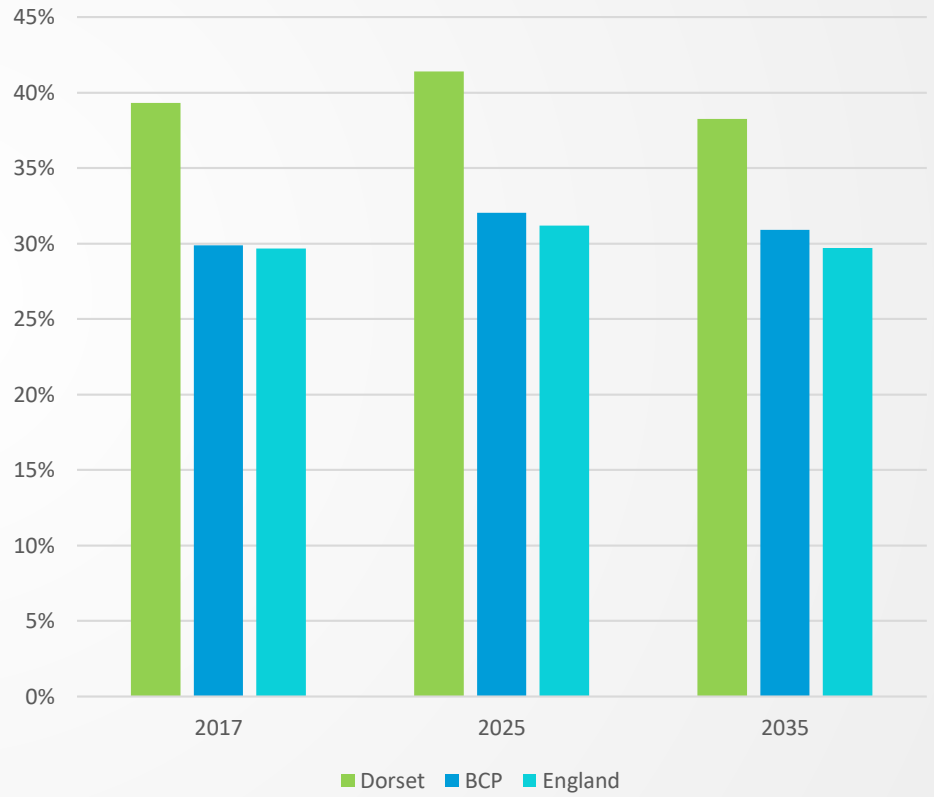
- Dorset Council area has a significantly older demographic profile than the BCP urban area
- Only 14% of the population in Dorset Council area are aged between 15-29 years

Dorset Council area has the oldest population in the country – and predicted to age considerably

Aged 65+ (as % of total population) – current and estimated



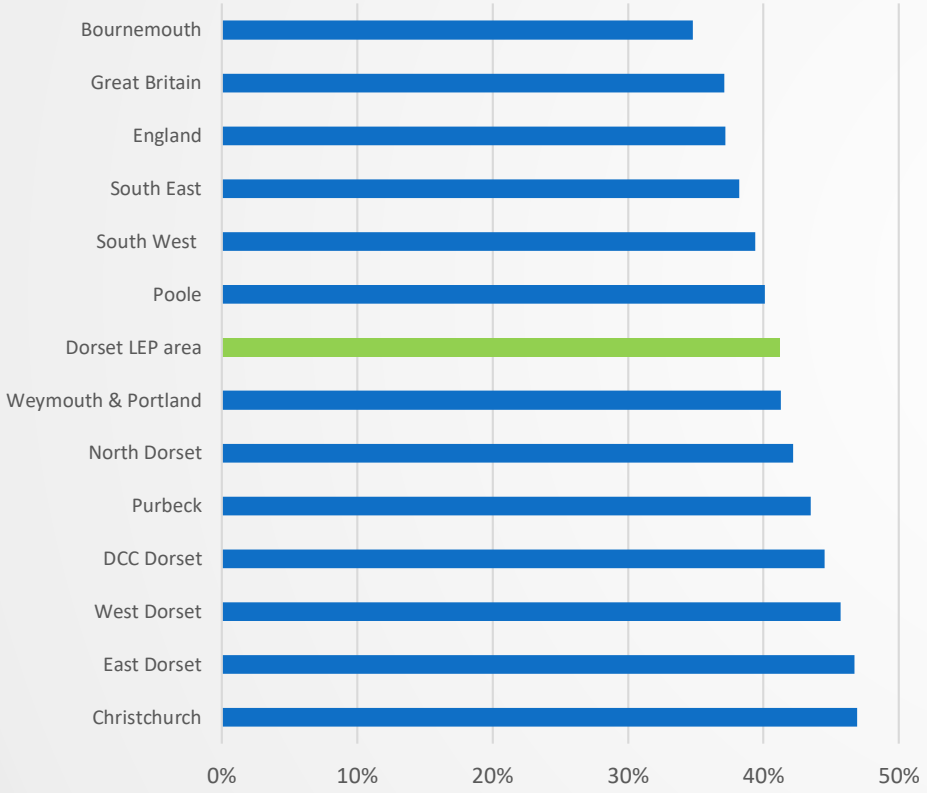
Aged 50-64 (as % of working age population) – current and estimated



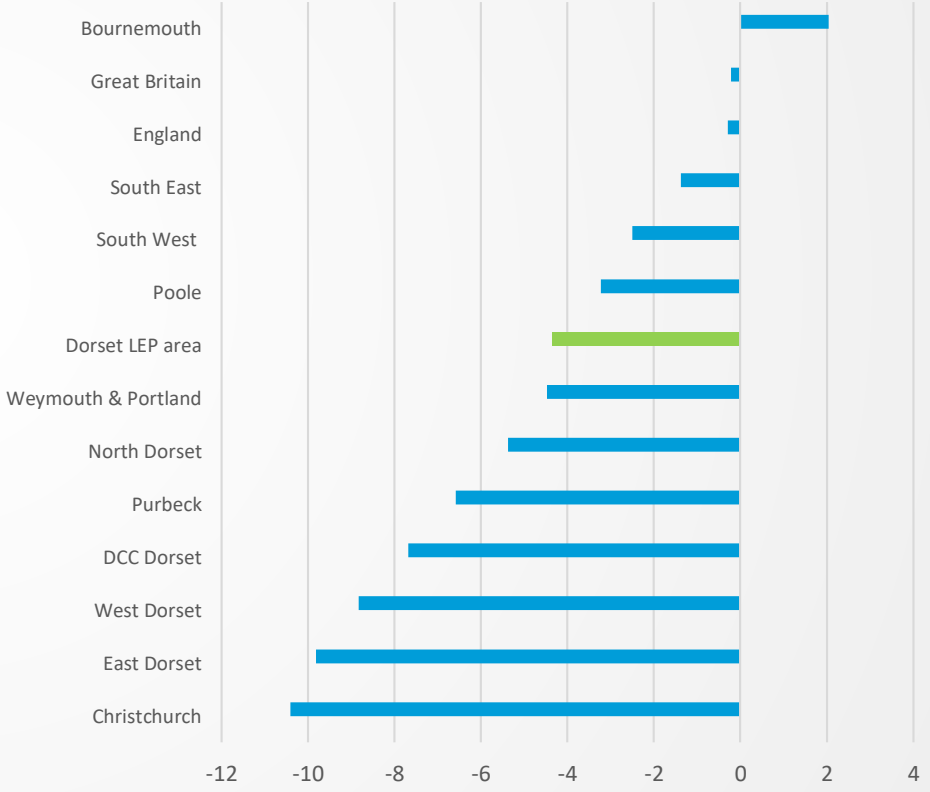
(Source: ONS Population Projections)

Some areas have heightened ‘demographic risk’

% non-working age population (demographic risk)



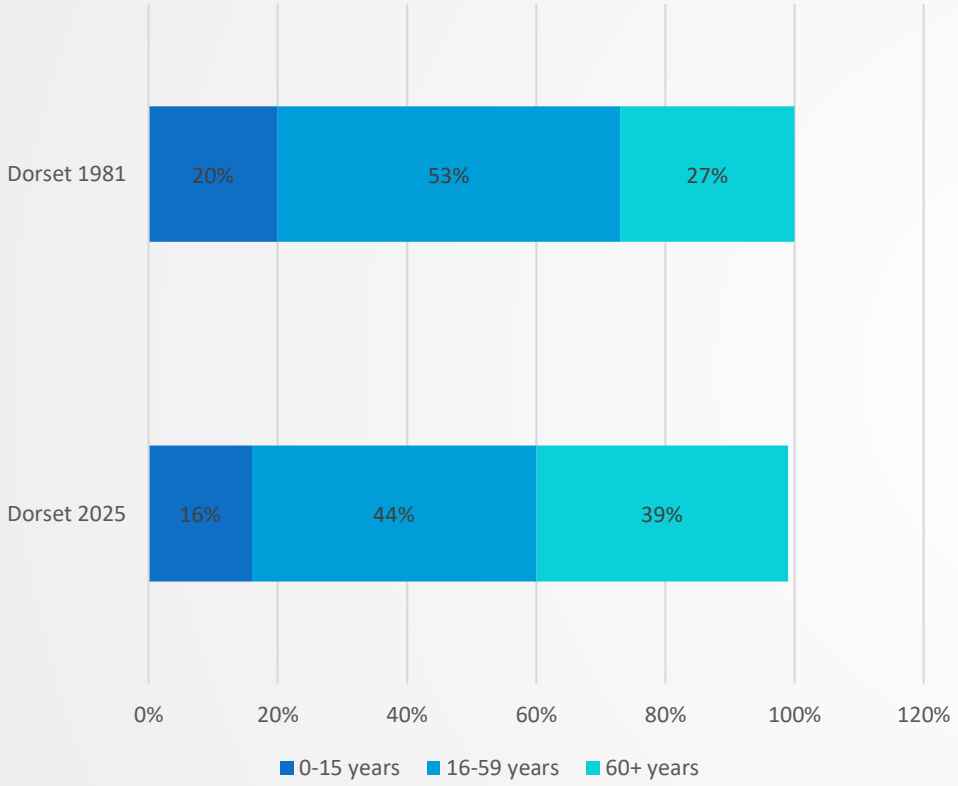
Demographic risk – distance from national average (percentage point)



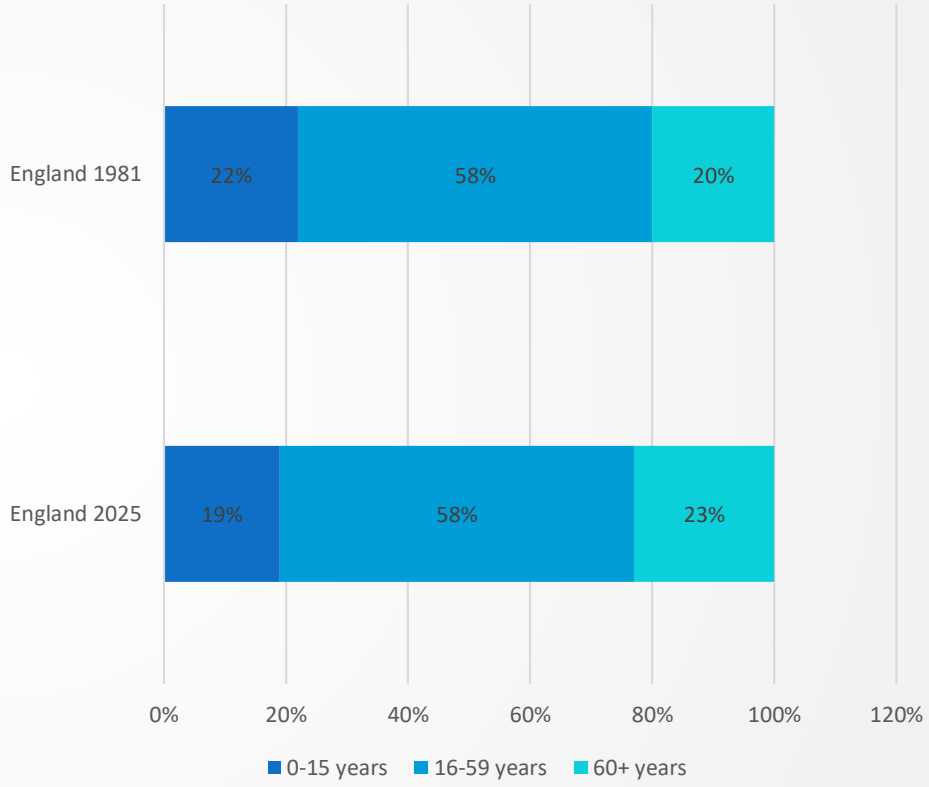
(Source: Localis/Dorset Council analysis)

The ageing population

Dorset population projections by age group



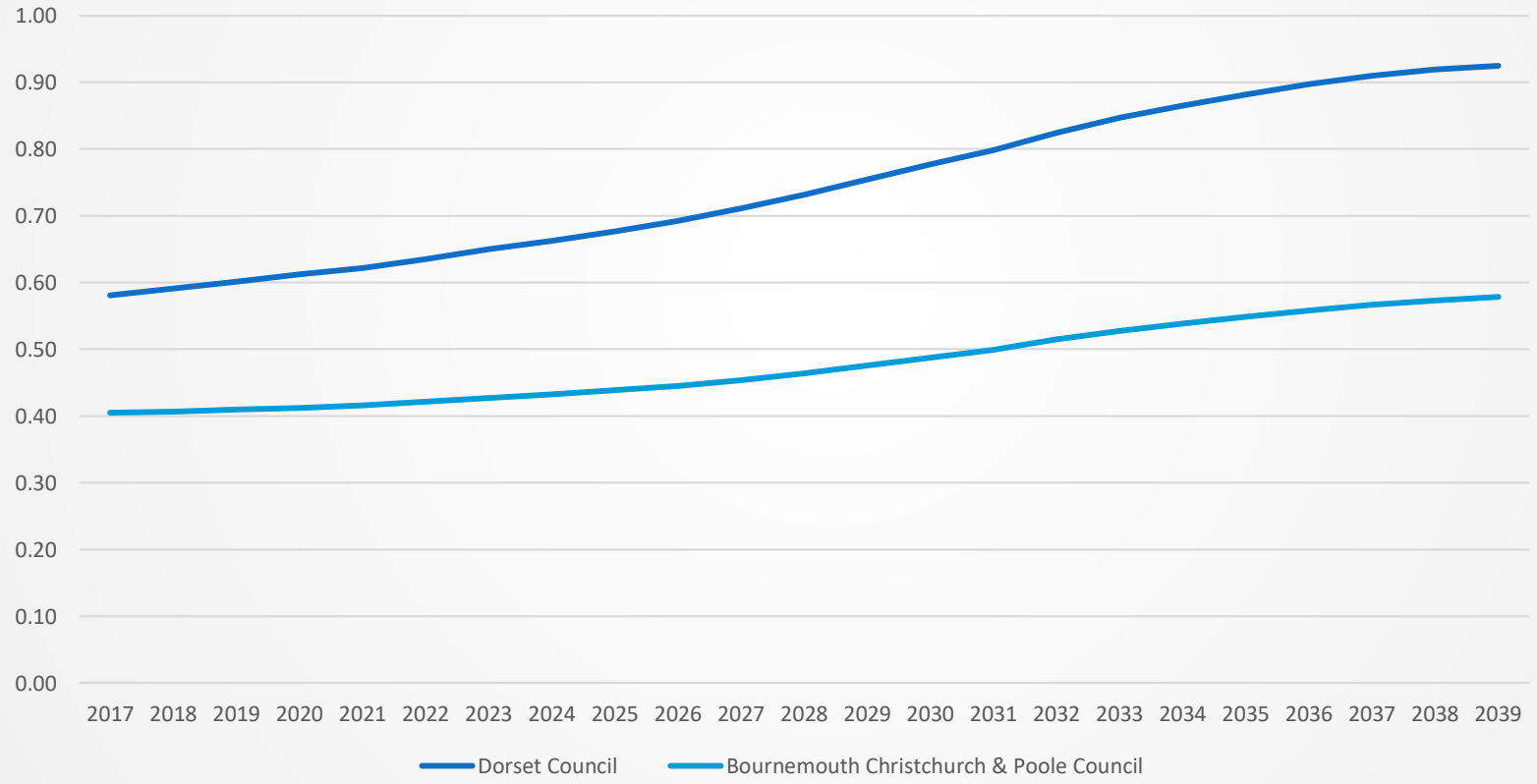
England population projections by age group



(Source: Population projections by age group)

There will be increasingly more people of pension age for every person of working age, particularly in rural areas

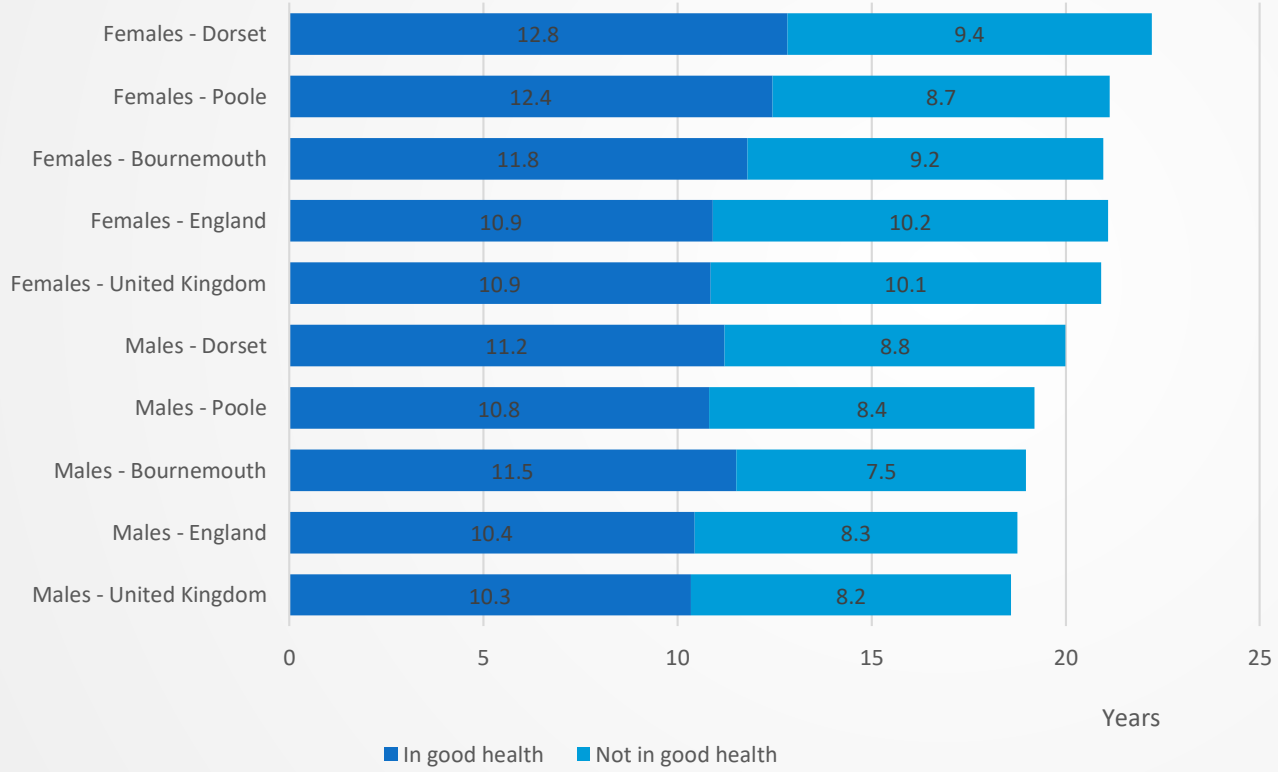
Old age dependency ratio, 2017 to 2039 (projected) – number of people of state pension age per working age population



(Source: 2017 based Trend led population projections - ONS)

Around half of remaining life is spent in poor health at age 65

Life expectancy and the proportion of life spent in good health at aged 65 years, by sex 2015 to 2017

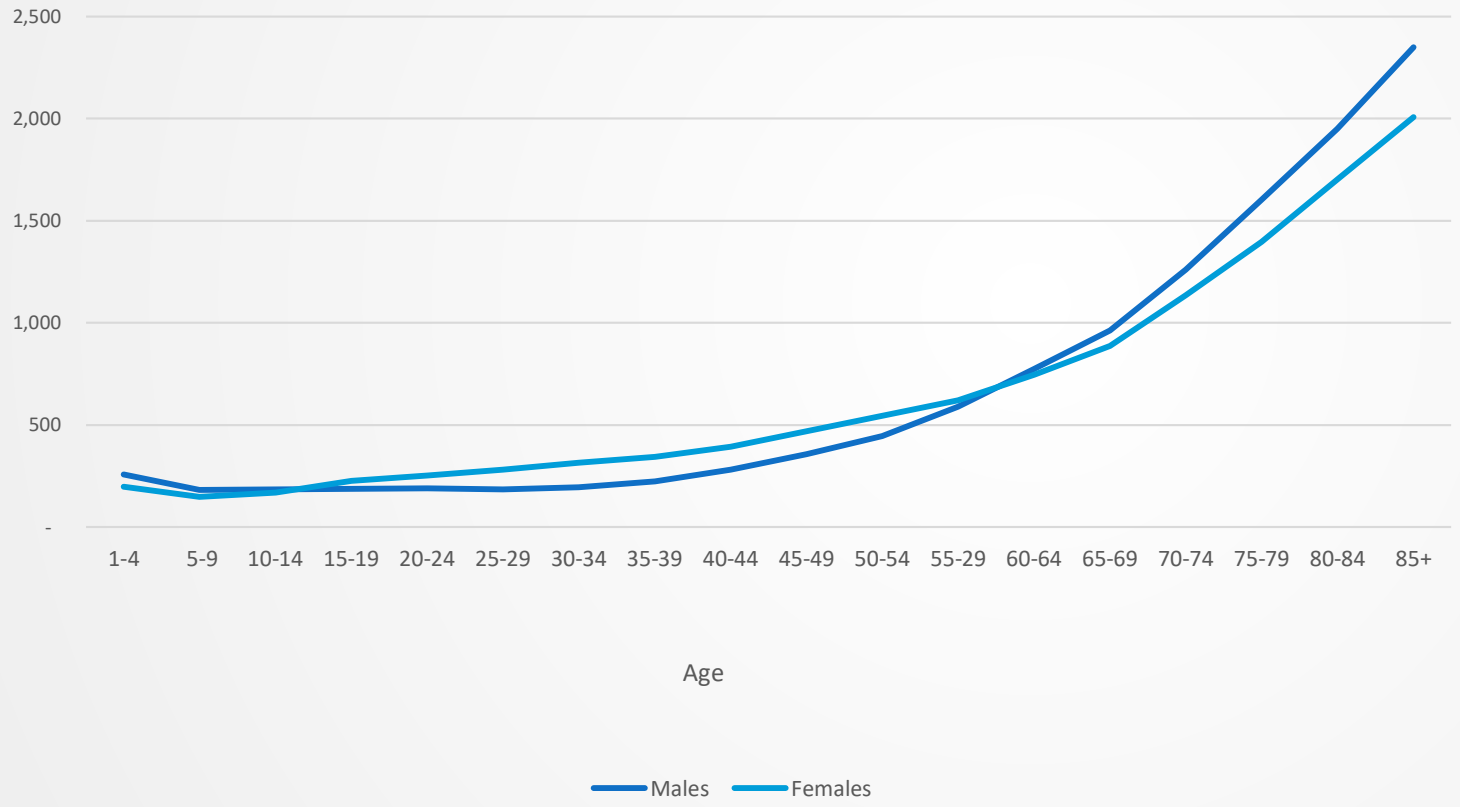


- Just over half of life post-retirement is spent in 'good health'
- Significant implications for the cost of social care
- Improving this proportion represents an issue/opportunity – potential individual and societal benefits are highly significant

(Source: Health state life expectancy at birth and at age 65 by local areas - ONS)

Healthcare demand increases with age.. a societal opportunity to reduce acute care costs?

NHS General and acute care age-cost curve 2016/17 to 2020/21 (est. £ spend per person per year)

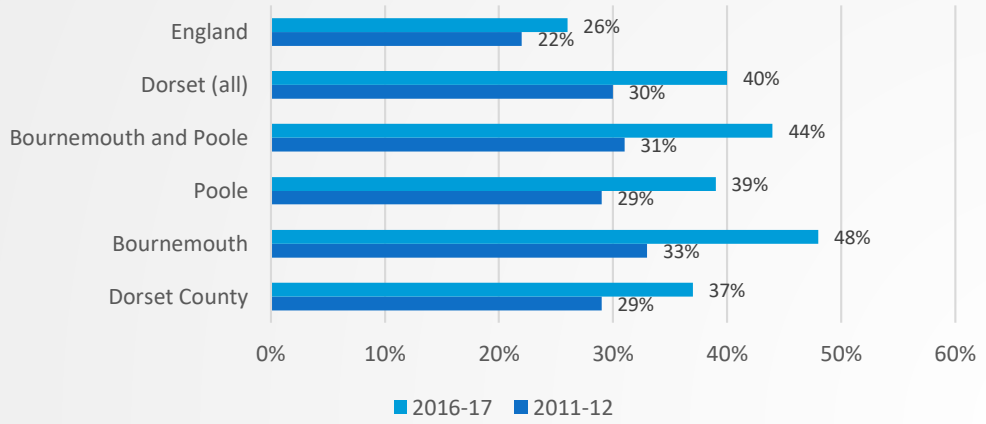


- Acute care costs increase exponentially with age
- Marked differences between sex – greater cost for post-65 acute care for men

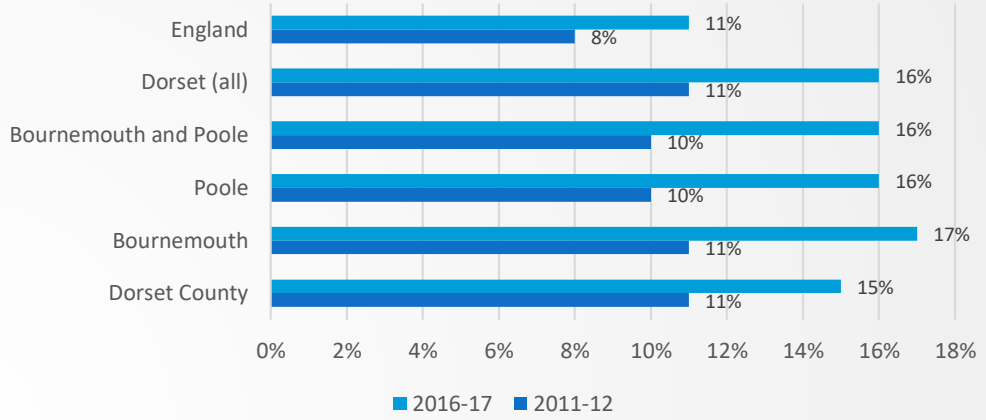
(Source: Technical Guide to Allocation Formulae and Pace of Change – NHS England)

Increasing cost of social care

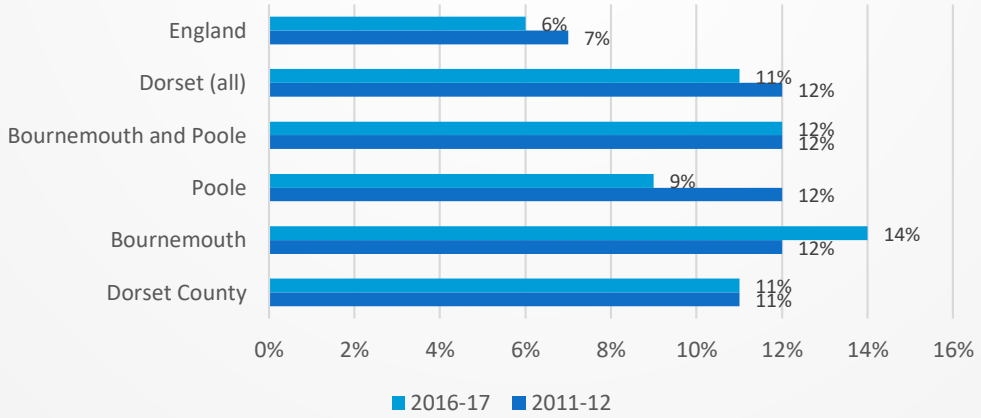
Social care spend as % of total service expenditure (11-12 and 16-17)



18-64 social care spend as % of total service expenditure (11-12 and 16-17)



65+ social care spend as % of total service expenditure (11-12 and 16-17)



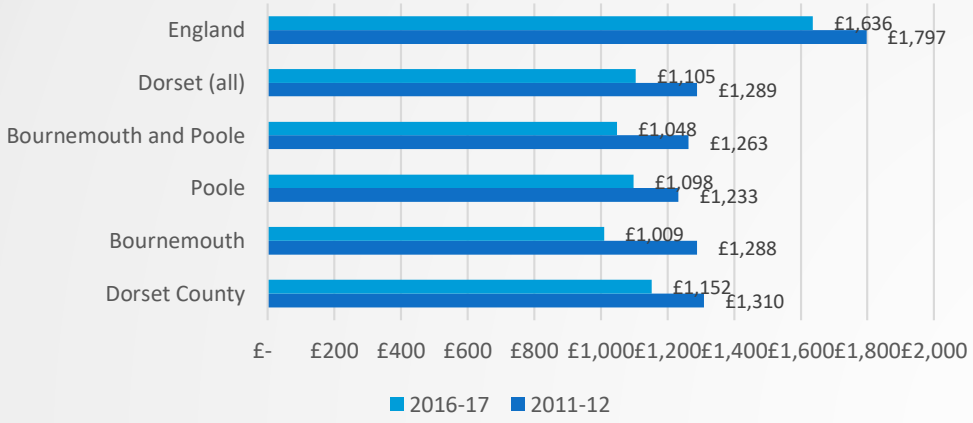
(Source: DCLG General Fund Revenue Account Outturn, Social Care and Public Health Services (2011-12 and 2016-17))

Increasing cost of social care – relative cost higher in DLEP area

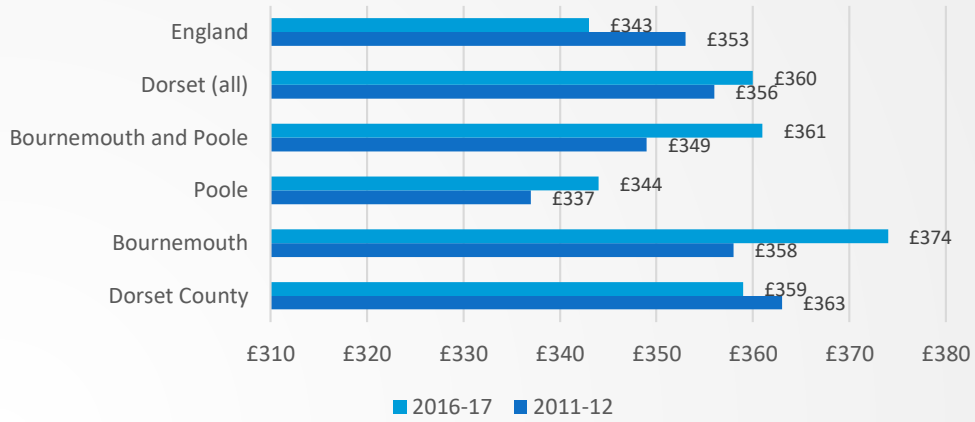
- Social care spending in Dorset as proportion of total service expenditure considerably higher than national average (40% compared to 26% in England)
- Proportion highest in Bournemouth (48%)
- Increasing share – proportion of expenditure spent on adult social care rising from 11% to 16% in Dorset in just 5 years
- Difference is greatest in 65+ - Dorset (11%) and Bournemouth (14%) expenditure on social care for 65+ double the national average (6%)
- Total service expenditure decreased from £961mn to £848mn (a drop of 12%), greater than the decrease in England (5%)

But less being spent per head….

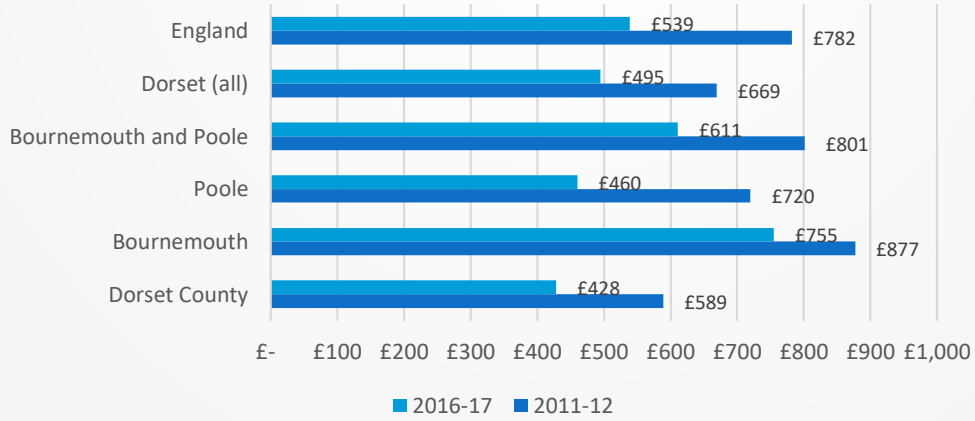
Total social care/head (11-12 and 16-17)



Adult social care spend/18+ population (11-12 and 16-17)



65+ social care spend/65+ population (11-12 and 16-17)



(Source: DCLG General Fund Revenue Account Outturn, Social Care and Public Health Services (2011-12 and 2016-17))

But less being spent per head – reflecting resource constraints

- Total service expenditure/head in Dorset in 2016/17 stood at £1,105, significantly lower than the £1,636 figure for England
- However, adults social care/head slightly above the national average – but below average for 65+ spend - £360 compared to £343 (however, in Bournemouth figure is much greater at £755)
- 65+ social care spend decreased disproportionately in all areas of Dorset over 5 years (for example, dropping by 36% from £720 to £460
- Bournemouth experienced a much smaller fall in per head spend for 65+ - dropping by 14% (compared to 31% nationally)

GRAND CHALLENGES:

CLEAN GROWTH

The value of Dorset's environment

Dorset's environmental economy – as measured through four methods:

Environmental Goods and Services (EGSS) approach: Dorset's 'share' of national environmental accounts ('top down' approach) - £0.3-£0.9bn GVA (2013 prices) and 3,900-16,800 FTE jobs

Sector flows approach: 'Bottom up' approach using SIC/sector approach - £1.3-£1.5bn GVA (2013 prices) and 25,000-35,000 FTE jobs

Green economy approach: Broader definition of 'green economy' - £2.5bn GVA (2013 prices) and 61,000 FTE jobs

Asset flows approach: Dorset's natural capital asset base and incorporating aspects of environmental flows not included in 'traditional' economic accounts - £4.5bn GVA (or £1.8bn if value of carbon sequestration is deducted)

Headline level – Dorset's environmental economy worth between £0.9bn and £2.5bn per year and supporting between 17,000 and 61,000 jobs

Central estimate – environmental economy worth approximately £1.5bn per annum (2013 prices) and 30,000 jobs – equating to circa 8%-10% of Dorset's overall economy each year

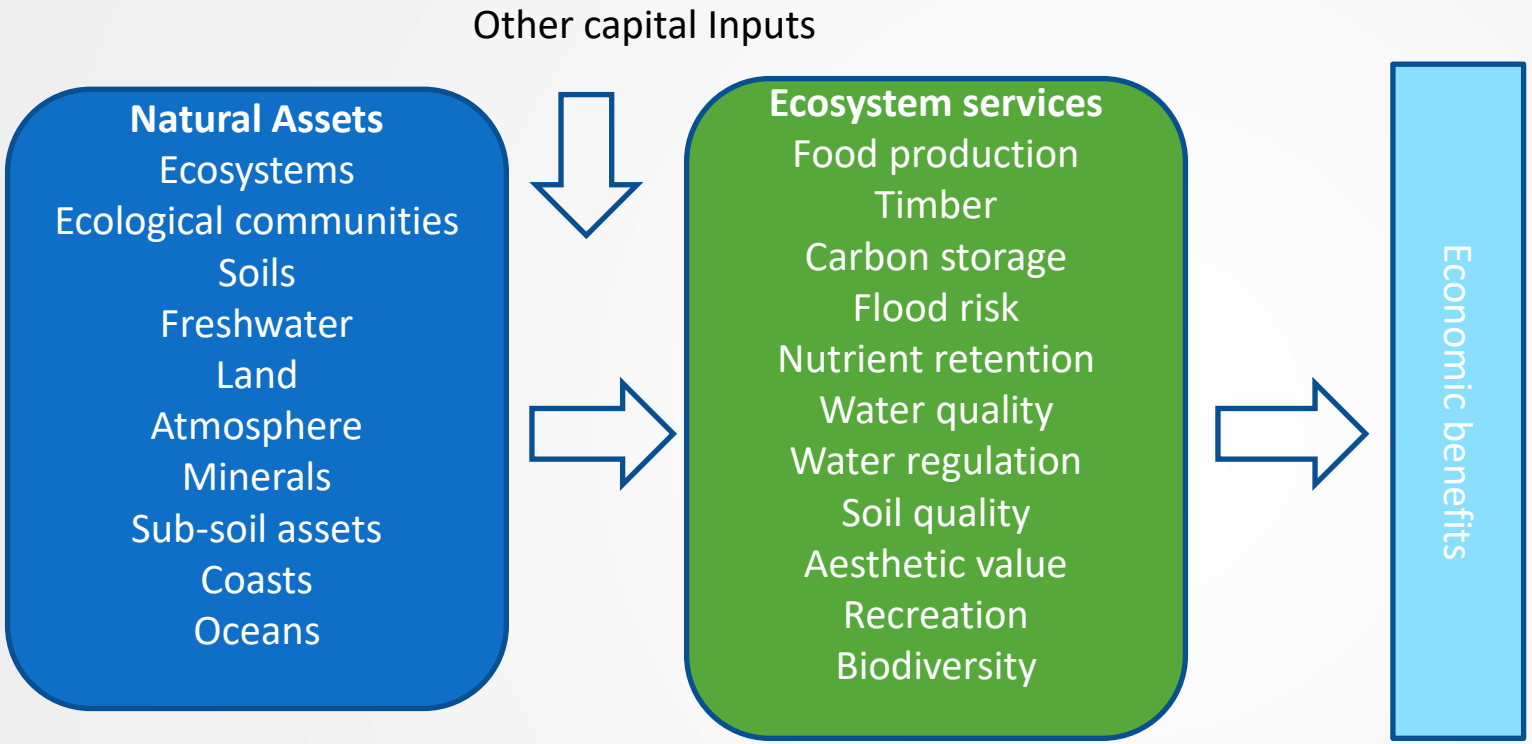
(Source: Dorset's Environmental Economy – Ash Futures - 2015)

Importance of environmental quality – residents & visitors

- Two-thirds of Dorset residents (survey respondents) feel that the quality of the local environment is either ‘very important’ or ‘crucial – the main motivation’ for their decision to live in area
- 80% felt that a deterioration of the local environment would have either a ‘negative’ or ‘major negative’ impact on their wellbeing
- A survey of visitors/tourists found that Dorset’s natural environment was the primary factor in choosing to visit the area
- Businesses value the importance of being near environmentally designated areas such as the AONB’s or Jurassic Coast World Heritage Site
- One of primary weaknesses perceived to be ‘free rider’ issues – it is free for everyone to enjoy, but not all to contribute. Environmental quality seen as ‘someone else’s problem’

(Source: Dorset’s Environmental Economy – Ash Futures - 2015)

The importance of natural capital



(Source: Natural capital and provision of ecosystem services benefits to people: a framework (adapted from Natural Capital Committee -2014)

- The link between natural capital and ecosystem service flows is well-established
- The extent/breadth of service flows is multi-faceted
- Many global examples of where environmental degradation has detrimentally impacted economic growth
- Negative relationship between economic growth and biodiversity – suggesting that economic development been achieved through the 'liquidation of natural assets'

Decline in natural capital

- 75% of Dorset's land area is farmed, of which one-third is arable
- Recent research focusing on Dorset's natural capital estimates that over the past 80 years there has been a 97% loss in neutral grassland. The area of heathland patches has declined by 29% since 1978
- 22% of heathland and 17% of broadleaf woodland - converted to conifer plantations since 1930
- Provision of ecosystem services (benefits provided by ecosystems to people) has declined significantly since the 1930s. Some services, such as soil quality and carbon storage, have declined continuously over this period
- Provision of ecosystem services is important to local businesses. Overall, 47% of Dorset businesses surveyed stated that they were at least somewhat dependent on service flows
- Research detected a number of ecological thresholds in relation to the status of natural capital assets – suggesting that future environmental degradation could lead to relatively abrupt changes in provision of ecosystem services. This could have significant impact on economy.
- Investment in natural capital could help mitigate these risks

(Source: Trends in Natural Capital, ecosystem services an economic development in Dorset – Bournemouth University, University of Cambridge and Centre for Ecology & Hydrology - 2019)

Ecosystem services – future scenarios

- Research developed number of scenarios (2015-2050) – modelling changes in both the intensification of agricultural use and land use for agricultural purposes
- Estimated the impact on ecosystem services provided to businesses
- The simulations suggest that under a 'Green Brexit – High intensity' scenario the positive impact on the Dorset economy could be highly significant – in terms of output and jobs – when considering ecosystem services
- This would require choices to reduce the amount of land used for agricultural purposes, returning it to high quality environmental habitats
- The modelling suggests that the long-term impact on the whole economy would exceed impact under an 'Agribrexit' scenario
- Overall conclusion is that investment in natural capital – and a move away from high intensity farming and other land uses – will produce significant economic benefits through the increased provision of ecosystem services
- One example could be climate change adaptation

(Source: Trends in Natural Capital, ecosystem services an economic development in Dorset – Bournemouth University, University of Cambridge and Centre for Ecology & Hydrology - 2019)

Environmental focus in FE provision

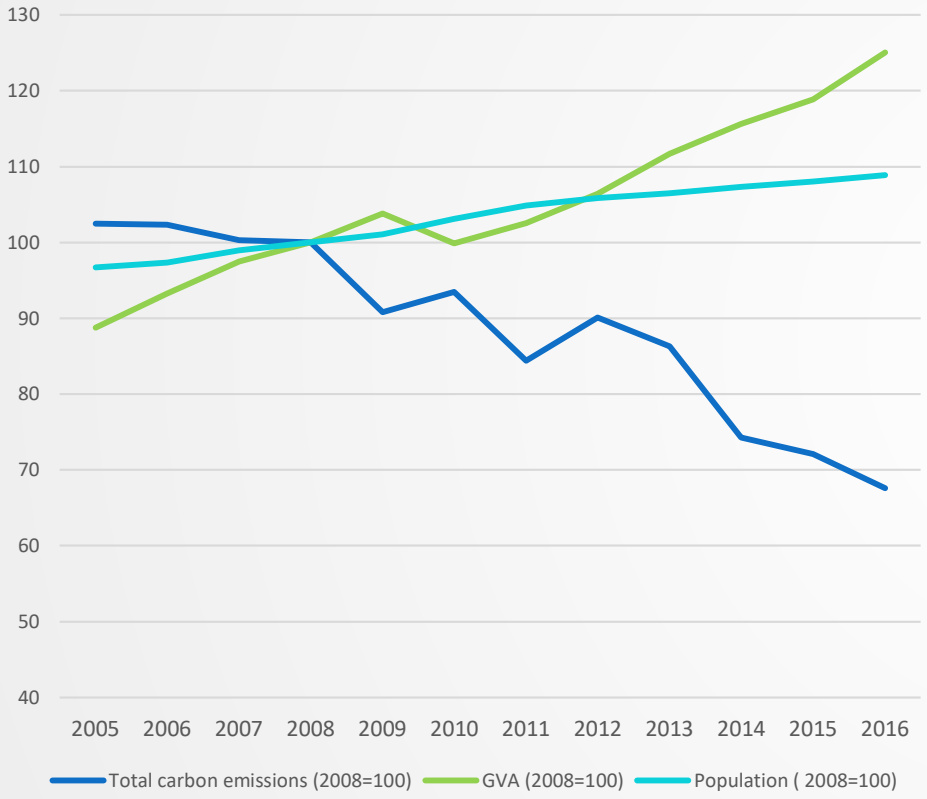
- Kingston Maurward College delivers high quality environmental and agricultural focused education and training, significant recent capital investment has included:
  - Dorset Studio School – aimed at students in years 9-11 who wish to study a comprehensive education alongside practical environmental and agricultural skills
  - Animal science building
  - Agri-tech building

- Existing land-based workforce is ageing and lacks formal qualifications (although not skills)
- The land-based and agri-tech industries have an increasing need for workers who can apply scientific and technological skills in a land-based environment
- Delivers courses to 750 FT students and 400 apprentices studying day release/part-time – mostly focused on agriculture and land-based activities

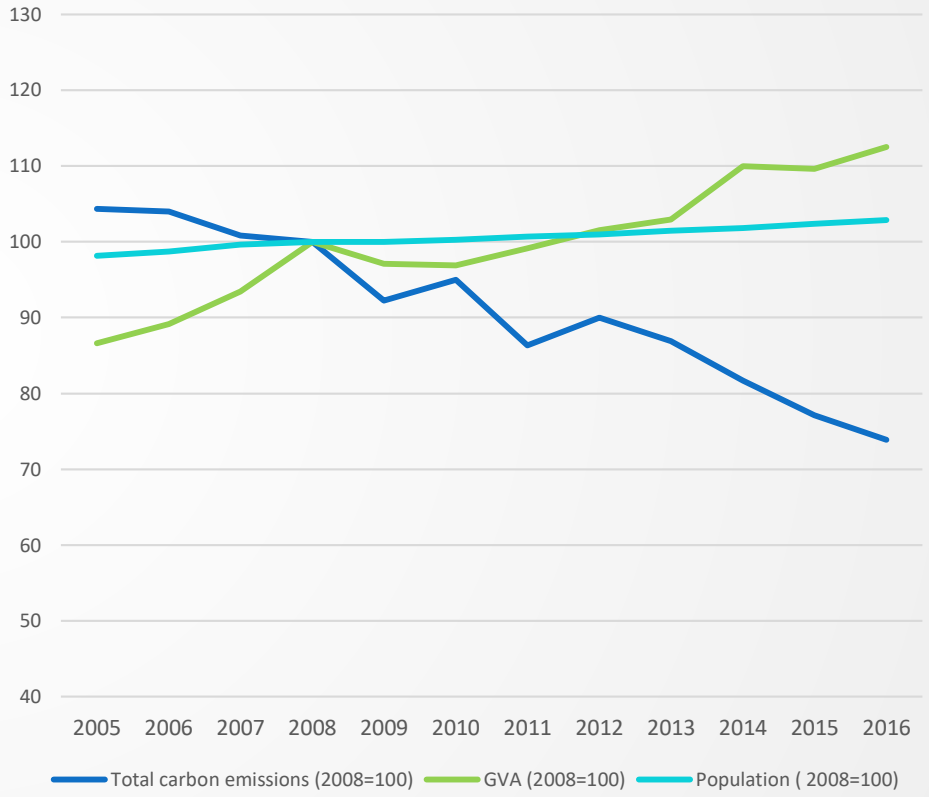
(Source: Kingston Maurward College)

Reduction in carbon emissions – despite economic growth

Economic and population growth and carbon emissions – Bournemouth and Poole (2008=100)



Economic and population growth and carbon emissions – Dorset CC (2008=100)



(Source: BEIS Local Authority emissions, UK population estimates and sub-regional GVA - ONS)

Reduction in carbon emissions – driven by urban areas

Reduction in carbon emissions 2005-2016 – industrial/commercial and total

	Bournemouth	Poole	Dorset CC	DLEP (derived)	UK
Industrial and Commercial	(44.1%)	(45.5%)	(39.0%)	(41.4%)	(41.9%)
Total (inc. domestic and transport)	(34.0%)	(34.1%)	(29.2%)	(31.1%)	(31.6%)

But reducing carbon emissions from transport proving more 'sticky' – particularly in rural areas

Reduction in carbon emissions 2005-2016 – transport

	Bournemouth	Poole	Dorset CC	DLEP (derived)	UK
Transport	(12.4%)	(11.6%)	(4.7%)	(7.0%)	(6.5%)

(Source: Source: BEIS Local Authority emissions)

Carbon Emissions – good foundation to build on

League Table ranking		CO_2 emissions (kt CO_2) per capita (2017)	Change (YoY)
1st	Bournemouth	3.0	-6.2%

- *Bournemouth emitted the least amount of carbon dioxide (CO2) per capita in 2017 out of all of the (46) UK Powerhouse cities, at 3.0 kt CO2 per person. Its low emissions can be partly attributed to the city's environmental strategy. This encourages the use of renewable energy, improved energy efficiency in new buildings, and greener travel.1 This has paid off – Bournemouth has decreased its carbon emissions per capita at an average rate of 4.9% per year since 2011.*

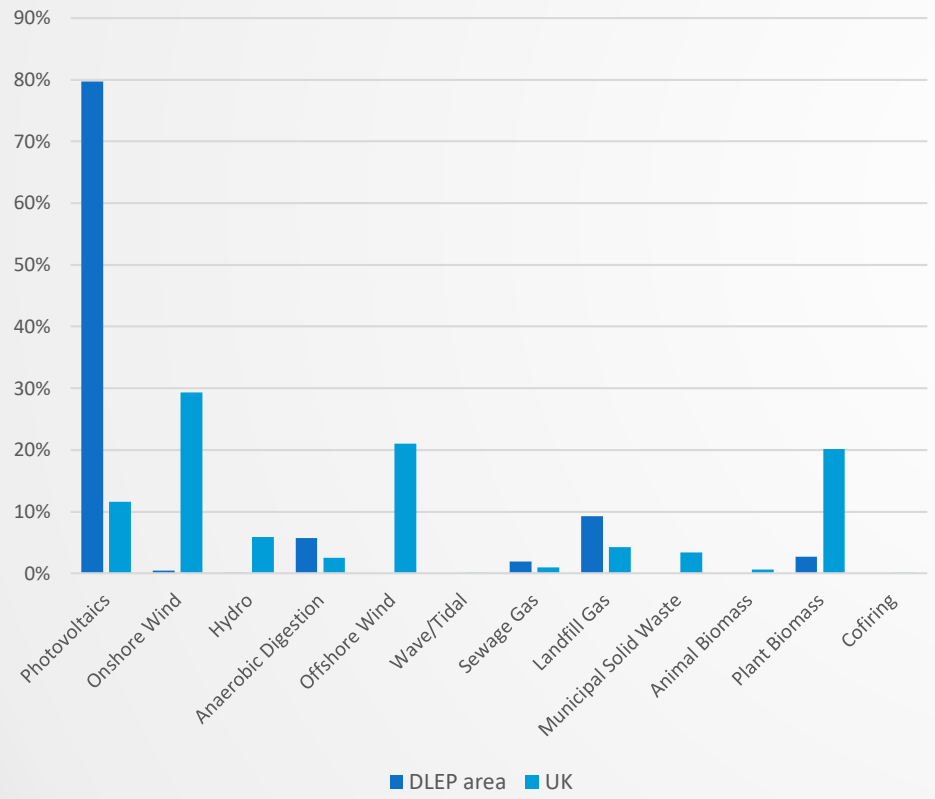
- *Interestingly, Bournemouth performed relatively poorly for environmentally-friendly commuters, even though it had the lowest per capita carbon emission in 2017. Only 3% of its population use low emission transport to get to work, and the share of those who use zero emission transport is slightly higher at 5% – still far behind the top performing cities. If Bournemouth can improve its share of low and zero emission transport, carbon emissions can decrease even further. This makes it possible for Bournemouth to become one of the most sustainable cities in the UK.*

League Table ranking		Share of population using low emission transport	Share of population using zero emission transport
42nd (40th)	Bournemouth	3%	5%

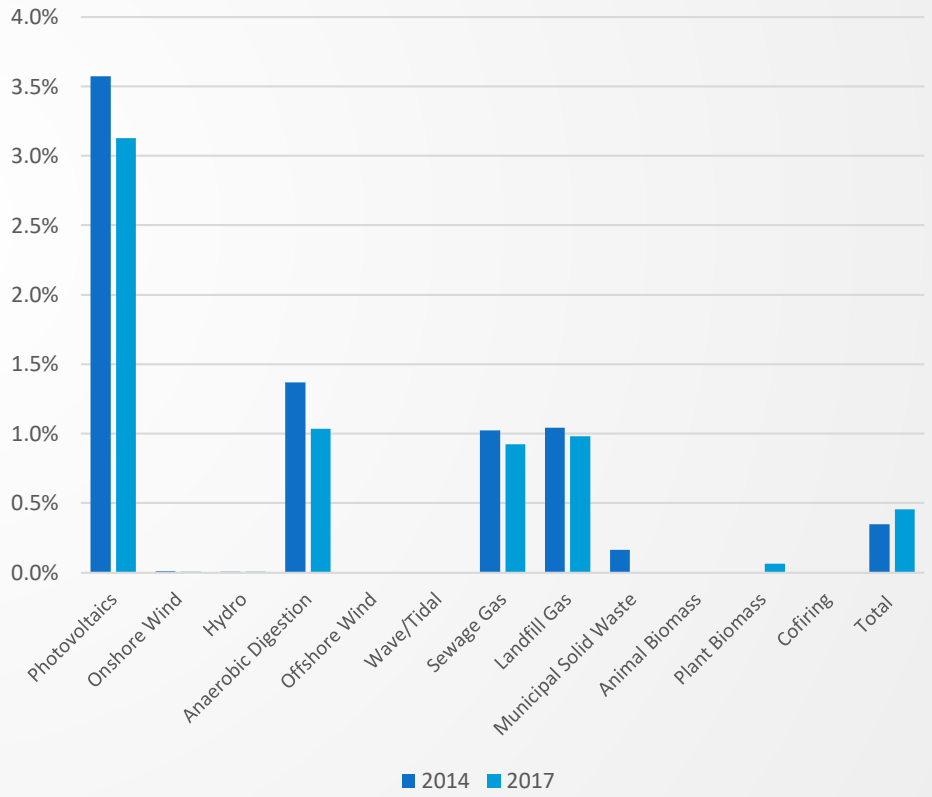
(Source: Source: UK Powerhouse – Sustainable Cities – Summer 2019 – Irwin Mitchell/Centre for Economic Research)

Renewable energy generation – dominated by solar

Proportion of renewable energy generation (MWh) by type (% total of RE generation)



Proportion of renewable energy generation in DLEP area (% UK)



(Source: Renewable energy generation by Local Authority - BEIS)

GRAND CHALLENGES:

AI AND THE DATA ECONOMY

Digital, creative and design – research expertise

"as technology progresses, creative skills will become more important, meaning that places that have specialized in creative work will most likely be the main beneficiaries of the digital age"
('Creativity versus Robots' – NESTA (2015))

- Arts University Bournemouth (AUB) is one of the leading specialist higher education art and design universities in Europe. It has a strong reputation for supporting the creative and cultural industries. AUB have launched a new rage of inter-disciplinary research groups, including:
  - AUB Human – design for good and sustainability with research projects including the circular economy, fast fashion and consumption and design for accessibility including dementia and visual impairment
  - AUB Materials - investigating applications of current and future materials in design and manufacture including the influence of bio-inspiration
  - AUB Animation – engaged in the health sector working with Southampton Children's Hospital on communication tools for children with complex conditions. They are also experimenting with projection mapping in architecture, medical applications and interactive entertainment
  - AUB Advantage – programme to support students developing entrepreneurial behaviour to support them into employment or entrepreneurship
- The AUB will also house the AUB Incubator – an Innovation Studio which will be dedicated to supporting start-ups with prototyping new products and developing sustainable business plans
- AUB graduates have established successful new creative businesses
- Future strategy for AUB is focused on becoming the anchor institution for the creative industries in the region

(Source: Arts University Bournemouth)

Digital, creative and design – research expertise

- Bournemouth University's Centre for Smart Immersive Technology (Games and Music Research) – investigates fundamental technologies that underpin augmented and virtual reality and digital games. Research projects include:
  - Smart VR, AR and Games Technology (algorithms, systems and applications)
  - Game Design Theory and Practice
  - BU Game Analytics Platform

- Bournemouth University's Centre for Digital Entertainment – national Doctoral Training Centre working with diverse digital business sectors including animation, VFX and games

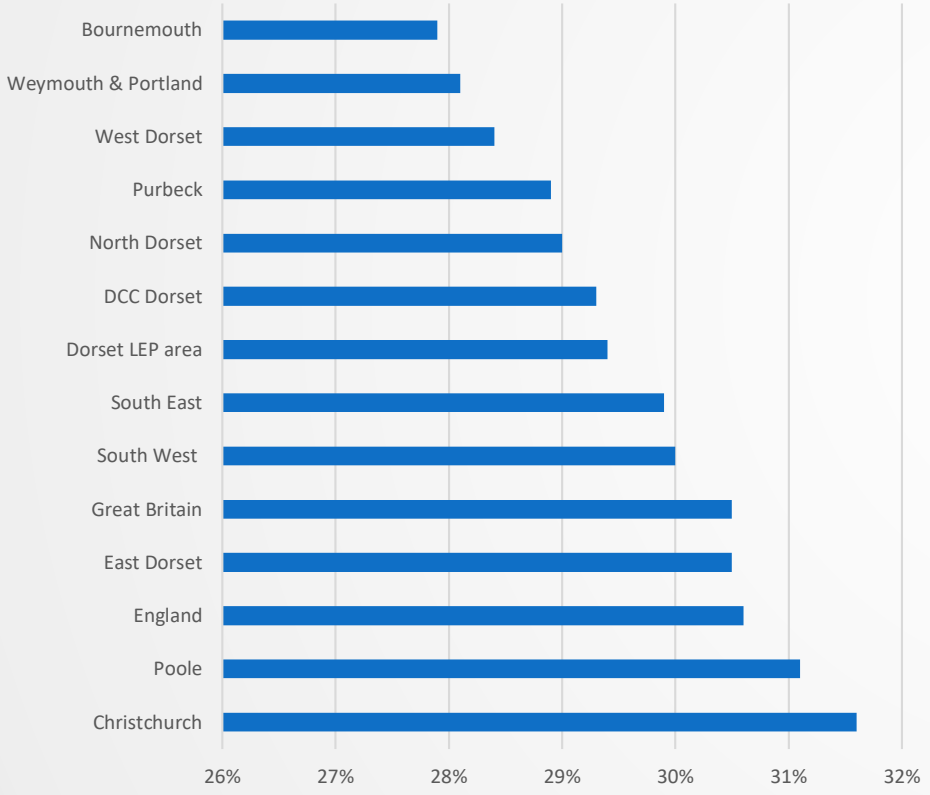
- Bournemouth University's Computing and Informatics Research Centre – fundamental and applied research, research themes include:

  - Cyber Security Research Group
  - Smart Technology Research Group
  - Human Computer Interaction Research Group
  - Machine Intelligence Group
  - Future and Complex Needs Networks Research Group

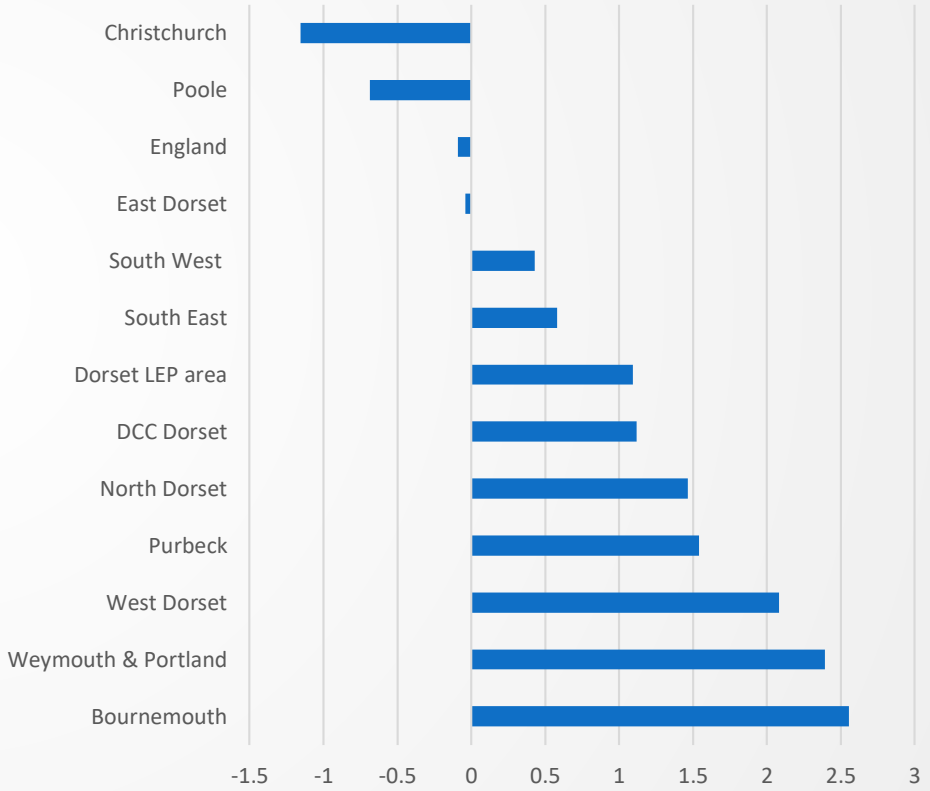
(Source: Arts University Bournemouth)

Automation – ‘at risk’ jobs

% non-working age population (automation risk)



Automation risk – distance from national average (percentage point)



(Source: Localis/Dorset Council analysis)

GRAND CHALLENGES:

FUTURE OF MOBILITY

Future mobility – Smart City agenda

- 5G infrastructure could enable the development of more sustainable transport solutions – including connected and autonomous vehicles and managing the transport system more effectively

- Local plans for (mmWave) 5G testbed could enable some local solutions to be developed – importantly for local businesses to utilise the testbed for potential solutions/services

- 5G (lower spectrum) is expected to be rolled out across urban areas in next couple of years – roll-out across rural years expected to lag considerably. Raises questions regarding transport solutions (amongst other factors) in rural areas

CONCLUSIONS

Conclusion

This evidence pack has involved the review of a significant amount of evidence and research

It has highlighted a number of key questions that need to inform the subsequent development of the Dorset LIS

Its aim has been to provide the evidence to substantiate, or challenge, the emerging priorities identified by local partners

However, it is important that it should not be viewed as the sole source of evidence for those emerging priorities. Quantified data/evidence can only ever tell part of the story

Not least, the developing strategic narrative and ‘deep dives’ provide more in-depth discourse around some of the key issues and opportunities that the LIS will focus on

Conclusion – key questions

Some of the key questions for local partners emerging from this aspect of the evidence review include:

- How can economic growth be achieved without the loss of Dorset's high-quality environmental assets (in terms of quantity and quality)? How can it be enhanced to help drive productivity?
- How can the DLEP area act as a 'test bed' for innovations in health and medical technologies – meshing increasing demand (aged and ageing population and need to maintain quality of life) with developing supply-side specialisms?
- How can specialisms in R&D and innovation be further developed so it impacts on the aggregate picture of generally lower levels of innovation activity in the area? How can links between the universities and local businesses be strengthened?
- How can the 'long-tail' of lower productivity businesses be most effectively positively influenced?
- How can key infrastructure improvements be made without causing damage to environmental assets and by enhancing those assets? How can key infrastructure improvements help unlock a range of outcomes such as employment space, strategic housing development and increased natural capital?
- How can the aims of the LIS be achieved at the same time as promoting more inclusive growth – what influence does this have on emerging priorities? Does it dilute the focus on productivity?
- How does the area address its own specific demographic crunch and need 'replacement demand' for labour

Factors of production – limitations leading to prioritisation

	Land (place)	Labour (people and skills)	Capital (ideas and innovation, infrastructure)	Entrepreneurship (business environment)
Issues identified	• Two-thirds of land protected by environmental designation or floodzone status • Decline in natural capital and biodiversity – reduction in ecosystem services • Resistance to wide-scale development	• Relatively aged and ageing population & workforce – 'demographic crunch' • Lower skill base in some parts of DLEP area • Flow of young people/graduates to Greater South East (GSE)	• Limitations on key physical and digital infrastructure • Existing transport infrastructure under increasing pressure • Lower levels of investment in innovative capacity	• Growth in new businesses remaining healthy • Indications that scale-up businesses performing well • Investment flows lower than in GSE • Indications that entrepreneurship active in urban area

Focus and priorities

Significant limitations on the land and labour resource available in DLEP area – expected to magnify

- Need to build on supply-side strengths e.g. digital capabilities, addressing the challenge of ageing society
- Need to protect and enhance environmental assets – promotion of 'clean growth' – minimising impact on land resource (quantity and quality)
- Need to invest in 'smarter' infrastructure improvements – including digital and key transport links Need to focus on upskilling existing and emerging workforce – for both replacement of existing and new jobs

www.dorsetlep.co.uk

@DorsetLEP
#LocalIndustrialStrategy
#Dorset
#IndustrialStrategy