



WEST MIDLANDS
COMBINED AUTHORITY

STRATEGIC ECONOMIC PLAN

Technical appendix SECTORS



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Introduction

The West Midlands Combined Authority has identified ten sectors which are fundamental to increasing GVA and employment and to achieving the eight strategic priorities as stated in the WMCA SEP. These ten sectors are composed of seven transformational sectors and three enabling sectors:

Transformational Sectors	Enabling Sectors
<ul style="list-style-type: none"> Advanced manufacturing; Business, professional and financial services; Construction (building technologies); Digital and creative; Lifesciences and social care; Logistics and transport technologies; Low carbon and environmental technologies. 	<ul style="list-style-type: none"> Cultural economy including sport; Public sector including education; Retail.

This technical appendix presents an overview of GVA and Employment across the West Midlands Combined Authority based on an analysis of ten carefully selected sectors. It will also explore how the ten sectors align to the eight strategic priorities as contained in the WMCA Strategic Economic Plan, and reports how GVA and Jobs changes under three distinct scenarios.¹

The figures contained within this appendix are derived from the Oxford Economics Model and Impact Tool.

Sector Analysis

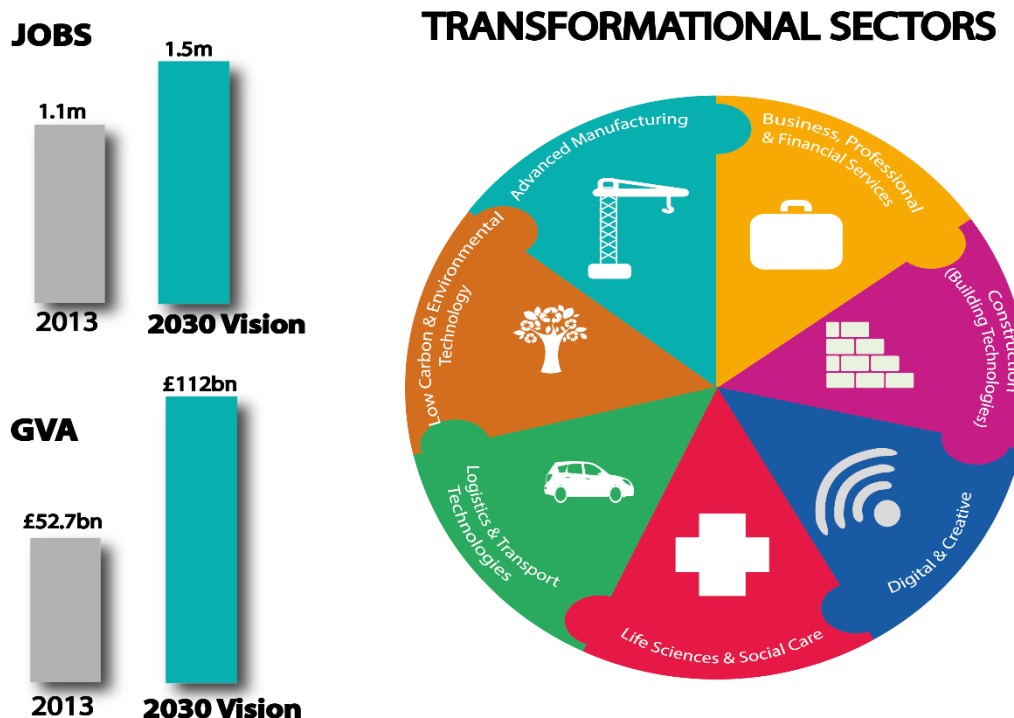
The following section presents an analysis of jobs and GVA across both the transformation and enabling sectors. The following table summarises how these indicators are expected to change over the period 2013-30 under the 'Vision Scenario'.

		2013	2030	Absolute Change 2013-30	% Change 2013-30
JOBS (Nos)	Transformational Sectors	1,116,894	1,465,590	348,696	31.2%
	Enabling Sectors	782,371	937,389	155,019	19.8%
	Total	1,899,264	2,402,979	503,714	26.5%
GVA (£)	Transformational Sectors	£52,704,210,279	£112,036,242,221	£59,332,031,942	112.6%
	Enabling Sectors	£25,022,291,154	£40,642,833,914	£15,620,542,760	62.4%
	Total	£77,726,501,433	£152,679,076,135	£74,952,574,702	96.4%

¹ Further information on the WMCA Scenario are contained in "An Economic Forecasting Model for the WMCA Nov. 2015"

Transformational Sectors

The following illustration highlights how employment and GVA is expected to change across the transformational sectors:



The seven transformation sectors are expected to experience an overall increase in jobs of 349k over the period 2013-30 from 1.1m in 2013 to 1.5m in 2030, which equates to an expansion of around 31%. The highest levels of employment growth are to be expected in Business Professional & Financial Services (47.6%). Low carbon and Environmental Technologies are forecast to rise by modest levels of 3.4%.

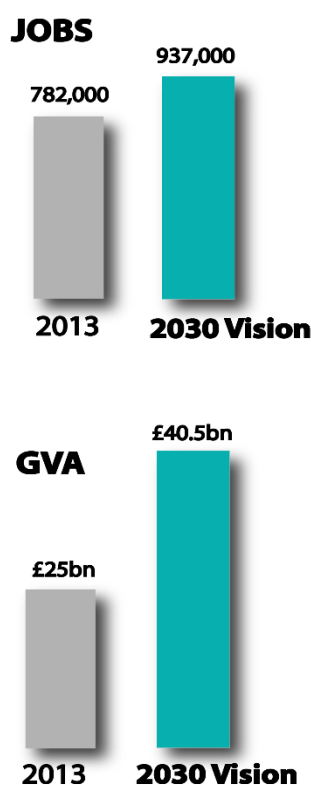
JOBS	2013 (No's)	2030 (No's)	Absolute Change 2013-30 (No's)	% Change 2013-30
Advanced Manufacturing and Engineering	184,156	204,206	20,050	10.9%
Business, Professional and Financial Services	317,503	468,573	151,070	47.6%
Construction (Building Technologies)	118,615	166,081	47,465	40.0%
Digital and Creative	72,373	101,471	29,099	40.2%
Life Sciences and Healthcare	248,829	323,796	74,968	30.1%
Logistics and Transport Technologies	152,794	178,072	25,278	16.5%
Low Carbon and Environmental Technologies	22,624	23,391	767	3.4%
TOTAL TRANSFORMATIONAL JOBS	1,116,894	1,465,590	348,696	31.2%

GVA is also expected to increase by 59bn over the same period from £52.7bn to £112bn in 2030 representing growth of 113%. The largest percentage increase is forecast across the Digital & Creating sector (186%), however the biggest absolute change is expected across Business, professional and Financial Services (£25.8bn).

GVA	2013 (£)	2030 (£)	Absolute Change 2013-30 (£)	% Change 2013-30
Advanced Manufacturing and Engineering	£8,571,611,357	£16,648,116,144	£8,076,504,787	94.2%
Business, Professional and Financial Services	£19,730,805,218	£45,541,728,805	£25,810,923,587	130.8%
Construction (Building Technologies)	£4,533,263,879	£8,912,282,754	£4,379,018,875	96.6%
Digital and Creative	£3,929,793,859	£11,235,752,609	£7,305,958,749	185.9%
Life Sciences and Healthcare	£6,122,484,874	£12,114,483,680	£5,991,998,806	97.9%
Logistics and Transport Technologies	£7,266,095,815	£12,784,982,814	£5,518,886,999	76.0%
Low Carbon and Environmental Technologies	£2,550,155,276	£4,798,895,415	£2,248,740,139	88.2%
Total Transformational GVA	£52,704,210,279	£112,036,242,221	£59,332,031,942	112.6%

Enabling Sectors

The following illustration demonstrates how jobs and GVA are expected to change across the three enabling sectors.



ENABLING SECTORS



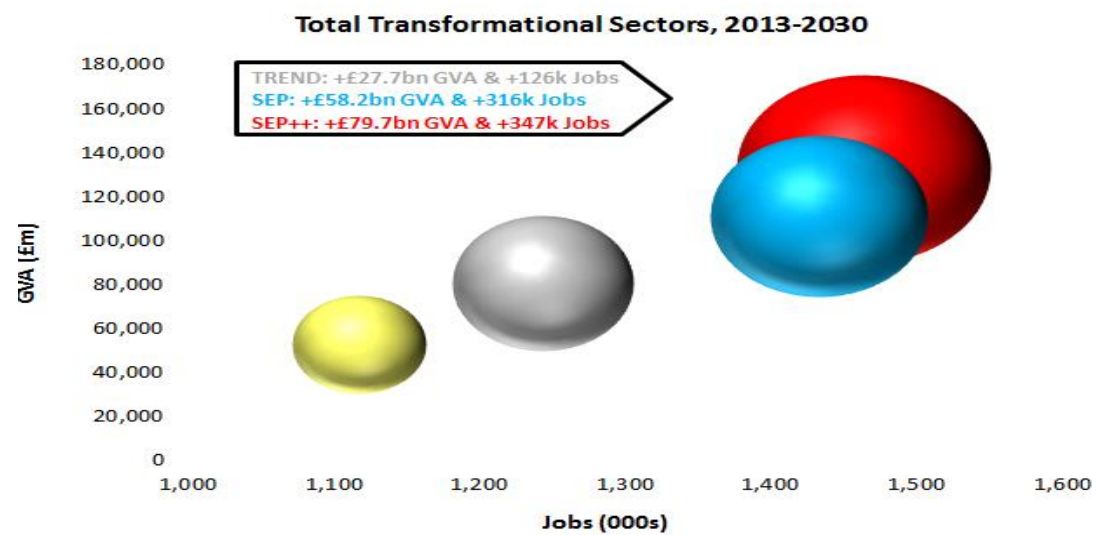
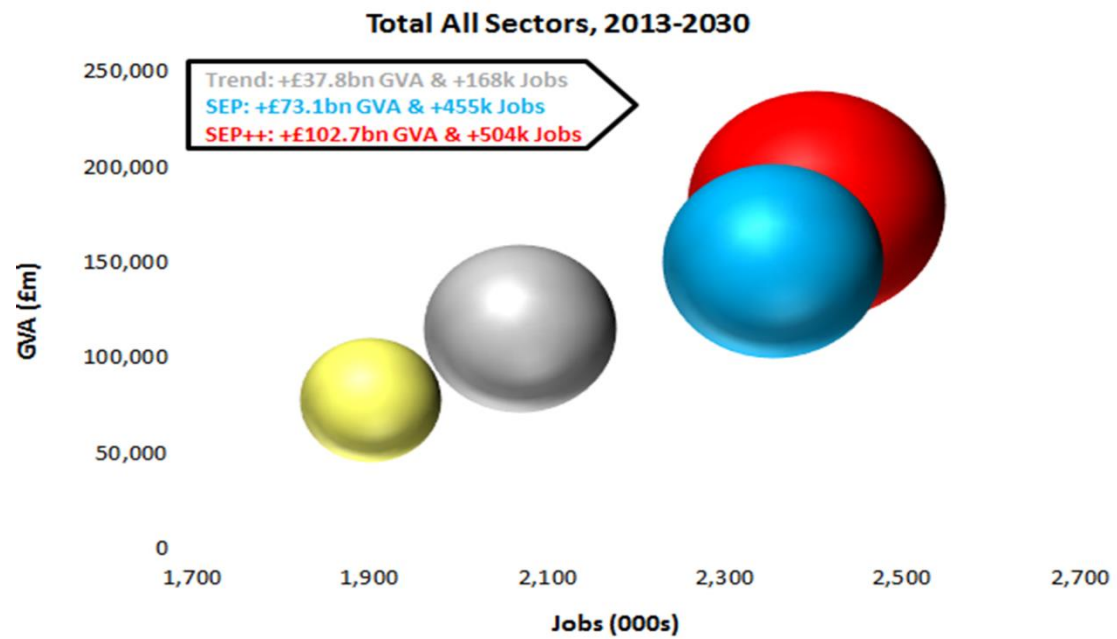
Similarly, across the enabling sectors employment is expected to grow from 782k in 2013 to 937k in 2030, a rise of almost a fifth. The highest percentage growth is expected across the cultural economy which includes sport. However, absolute growth is forecast to be highest across the retail sector at 82.5k.

JOB	2013 (No's)	2030 (No's)	Absolute Change 2013-30 (No's)	% Change 2013-30
Public Sector including Education	318,104	325,100	6,996	2.2%
Retail	316,277	398,862	82,585	26.1%
Cultural Economy including Sports	147,989	213,427	65,438	44.2%
Total Enabling	782,371	937,389	155,019	19.8%

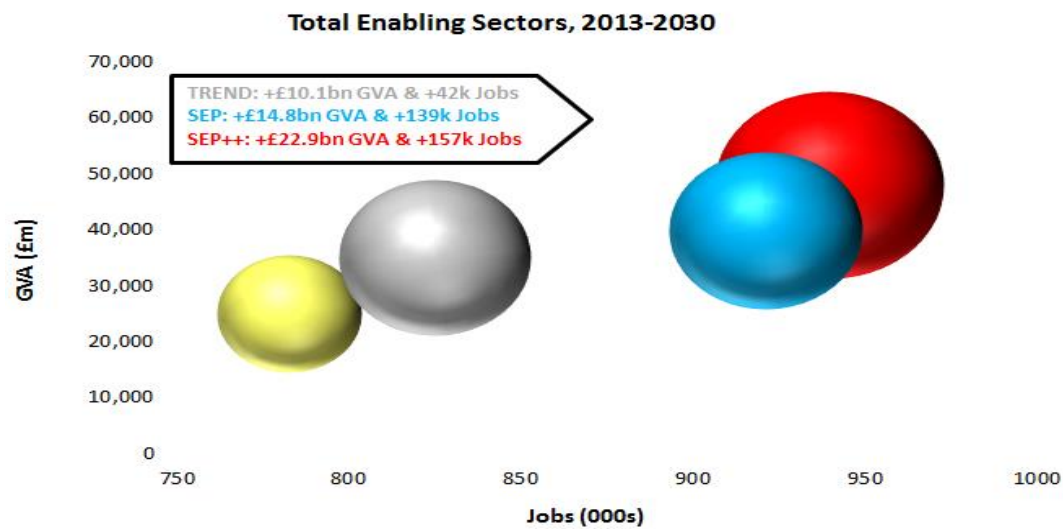
GVA is expected to increase by 62.4% over the period 2013-30 equating to an absolute rise of £15.6bn. The largest growth (in terms of percentage and absolute numbers) is across the retail sector.

GVA	2013 (£)	2030 (£)	Absolute Change 2013-30 (£)	% Change 2013-30
Public Sector inc Education	£10,801,675,660	£12,942,276,483	£2,140,600,823	19.8%
Retail	£11,077,930,310	£21,630,754,783	£10,552,824,473	95.3%
Cultural Economy inc Sports	£3,142,685,184	£6,069,802,648	£2,927,117,464	93.1%
Total Enabling	£25,022,291,154	£40,642,833,914	£15,620,542,760	62.4%

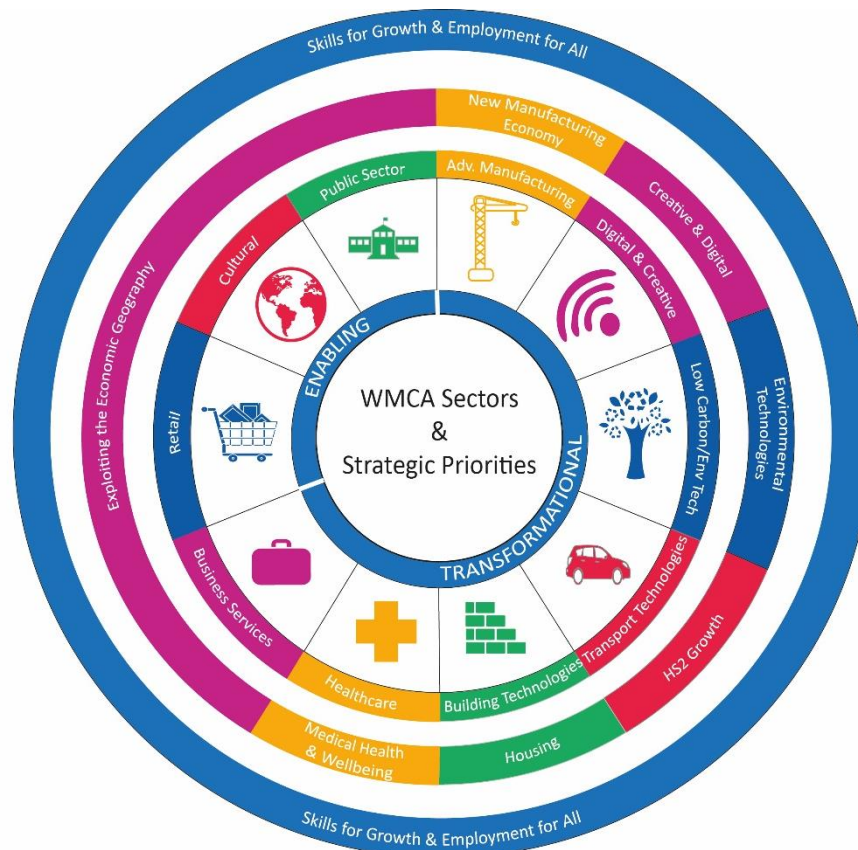
Summary Sector Bubble Graphs by Scenario



Alignment to Strategic Priorities



The following graphic outlines the alignment between the ten priority sectors and the 8 strategic priorities outlined in the WMCA Strategic Economic Plan.



This can be summarised as follows:

Priorities	Sectors
New Manufacturing Economy	Advanced Manufacturing & Engineering
Exploiting the Economic Geography	Business, Professional & Financial Services Public Sector including Geography Retail Cultural Economy including Sports
Housing	Construction (Building Technologies)
Creative and Digital	Digital & Creative
Medical, Health & Wellbeing	Life Sciences & Healthcare
HS2 Growth	Logistics & Transport Technologies
Environmental Technologies	Low Carbon & Environmental Technologies
Skills for Growth & Employment for All	All 10 Sectors

		2013	2021	2030	2013-2031	2013-2030		2013	2021	2030
Priority Area:	Sector:	JOBS ('000s)								
New Manufacturing Economy	Advanced Manufacturing and Engineering	184	202	204	18	20		10%	9%	8%
Exploiting the Economic Geography	Business, Professional and Financial Services	318	400	469	83	151		17%	18%	19%
Housing	Construction (Building Technologies)	119	141	166	23	47		6%	7%	7%
Creative & Digital	Digital and Creative	72	90	101	18	29		4%	4%	4%
Medical, Health & Wellbeing	Life Sciences and Healthcare	249	284	324	35	75		13%	13%	13%
HS2	Logistics and Transport Technologies	153	171	178	19	25		8%	8%	7%
Environmental Technologies	Low Carbon and Environmental Technologies	23	23	23	1	1		1%	1%	1%
Exploiting the Economic Geography	Public Sector including Education	318	317	325	-1	7		17%	15%	14%
Exploiting the Economic Geography	Retail	316	360	399	44	83		17%	17%	17%
Exploiting the Economic Geography	Cultural Economy including Sports	148	183	213	35	65		8%	8%	9%
	Total	1,899	2,172	2,403	273	504		100%	100%	100%
Exploiting the Economic Geography		1,100	1,260	1,406	160	306		58%	58%	59%
		GVA 2013 prices (£)								
New Manufacturing Economy	Advanced Manufacturing and Engineering	8,572	11,995	16,648	3	8		11%	11%	11%
Exploiting the Economic Geography	Business, Professional and Financial Services	19,731	29,752	45,542	10	26		25%	28%	30%
Housing	Construction (Building Technologies)	4,533	6,593	8,912	2	4		6%	6%	6%
Creative & Digital	Digital and Creative	3,930	6,775	11,236	3	7		5%	6%	7%
Medical, Health & Wellbeing	Life Sciences and Healthcare	6,122	8,127	12,114	2	6		8%	8%	8%
HS2	Logistics and Transport Technologies	7,266	9,638	12,785	2	6		9%	9%	8%
Environmental Technologies	Low Carbon and Environmental Technologies	2,550	3,183	4,799	1	2		3%	3%	3%
Exploiting the Economic Geography	Public Sector including Education	10,802	11,330	12,942	1	2		14%	11%	8%
Exploiting the Economic Geography	Retail	11,078	15,866	21,631	5	11		14%	15%	14%
Exploiting the Economic Geography	Cultural Economy including Sports	3,143	4,367	6,070	1	3		4%	4%	4%
	Total	77,727	107,626	152,679	30	75		100%	100%	100%
Exploiting the Economic Geography		44,753	61,315	86,185	17	41		58%	57%	56%

Occupation Analysis

This section presents an analysis of Workforce Forecasts for the WMCA under the Vision Scenario over the period 2013-30. Data has been derived directly from the Oxford Economic Forecasting Model. It should be noted that the numbers quoted at the detailed occupation level will be slightly lower than the employment forecasts previously quoted. This is primarily because previous forecasts for employment include the following areas:

- Employees in workplace based jobs
- The self-employed
- People in Her Majesties Forces
- Government Supported Trainees

The forecasts below are just based on workplace based jobs (people based) and so will be slightly lower. As an example, total employment in 2013 has been previously quoted at 1,899k. The figures below which are people based puts a value of 1,803k on the number in employment.

('000s)	2013	2021	2030	2013-21	2013-30
Administrative Occupations	160	174	187	14	27
Business and Public Service Associate Professionals	108	125	139	16	30
Business and Public Service Professionals	78	95	109	17	31
Caring Personal Service Occupations	127	142	158	15	31
Corporate Managers	122	138	151	16	29
Culture, Media and Sports Occupations	27	34	40	7	13
Customer Service Occupations	30	35	39	5	9
Elementary Occupations: Clerical and Services related	200	234	258	34	58
Elementary Occupations: Trades, Plant and Storage related	37	40	42	3	5
Health and Social Welfare Associate Professionals	23	26	28	3	6
Health Professionals	72	82	92	10	20
Leisure and Other Personal Service Occupations	42	54	62	11	19
Managers / Proprietors in agriculture and services	63	76	86	13	23
Process, Plant and Machine Operatives	76	79	77	3	1
Protective Service Occupations	16	14	14	-2	-2
Sales Occupations	127	145	161	18	34
Science and Technology Associate Professionals	27	30	32	3	5
Science and Technology Professionals	67	79	88	12	21
Secretarial and Related Occupations	54	60	65	7	12
Skilled Agricultural Trades	16	20	23	4	7
Skilled Construction and Building Trades	56	65	75	10	19
Skilled Metal and Electrical Trades	83	90	92	6	9
Teaching and Research Professionals	72	71	72	-1	0
Textiles, Printing and Other Skilled Trades	40	47	51	7	11
Transport and Mobile Machine Drivers and Operatives	80	92	100	12	20
TOTAL	1,803	2,046	2,241	244	438

- Under the Vision Scenario, the greatest percentage growth over the period 2013-30 is anticipated to be in Culture, Media and Sports Occupations (48%), followed by similar growth in Leisure & Other personal occupations (46%).
- All occupations bar teaching and protective services will experience growth in employment.
- In terms of largest Absolute Growth in employment, clerical and administrative roles will increase by around 58,000 over the 17-year period. There will also be a fairly large rise in sales and caring roles.
- Teaching and research professionals will experience no growth over the period 2013-30.
- Process, plant and machine operatives are forecast to see minimal growth over the period 2013-30.

The following table highlights the overall change at the Broad Occupational Group over the period 2013 to 2030 under the Vision scenario. This table amalgamates the occupational categories into smaller groups so that we can gain a better understanding of where significant changes are likely to take place

('000s)	2013	2021	2030	2013-21	2013-30	2013	2021	2030
Managers and senior officials	185	214	237	29	52	10%	10%	11%
Professionals	289	327	360	38	72	16%	16%	16%
Associate professional and technical	201	229	252	27	51	11%	11%	11%
Administrative and secretarial	214	234	253	20	39	12%	11%	11%
Skilled trades occupations	195	222	241	27	45	11%	11%	11%
Personal services occupations	169	195	220	26	51	9%	10%	10%
Sales and customer service	157	181	201	24	43	9%	9%	9%
Process, plant and machine operatives	156	171	178	15	21	9%	8%	8%
Elementary occupations	237	274	300	37	63	13%	13%	13%
TOTAL	1,803	2,046	2,241	244	438	100%	100%	100%

- Personal Service Occupations will see growth of 30% compared to a modest 14% for Process, Plant and Machine Operatives.
- However, in terms of absolute numbers, professional occupations are expected to experience the greatest growth of 72,000 people
- Large growth is also anticipated for Managers and senior officials and the is forecast to be a fairly large expansion for elementary roles.

By grouping the occupations into levels level we arrive at the following summary change over the period 2013-30 under the vision scenario:

('000s)	2013	2030	2030	2013-21	2013-30	% Change 2013-30
Level 4	674	769	849	95	175	26%
Level 3	195	222	241	27	45	23%
Level 2	696	781	851	85	155	22%
Level 1	237	274	300	37	63	27%
Total	1,803	2,046	2,241	244	438	24%

The largest absolute growth in numbers will be for occupations that operate at level 4 and above. There will also be a significant rise for level 2 roles.

The Table overleaf explores the percentage growth in employment by occupation and industrial sector over the period 2013-30. Significant contraction is forecast across all occupations in Manufacturing and Public Administration. However, the vast majority of sectors are likely to experience significant growth.

(%)	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, air con supply	Water supply, sewerage, waste	Construction	Wholesale, retail, repair of vehicles	Transport and storage	Accommodation and food services	Information and communication	Financial and insurance activities	Real estate activities	Prof, scientific, technical activities	Admin and support services	Public admin and defence	Education	Health and social work	Arts, entertainment and recreation	Other service activities
Managers and senior officials	27%	45%	-2%	0%	14%	37%	23%	34%	41%	60%	14%	51%	51%	42%	-12%	6%	30%	59%	55%
Professional	28%	51%	3%	4%	7%	36%	18%	26%	41%	51%	19%	47%	56%	40%	-13%	0%	27%	53%	66%
Associate professional & technical	26%	40%	-2%	-3%	1%	34%	16%	33%	35%	43%	21%	46%	55%	28%	-21%	2%	24%	52%	53%
Administrative and secretarial	24%	37%	-9%	-10%	-5%	37%	8%	30%	40%	32%	0%	48%	51%	35%	-20%	-10%	12%	34%	44%
Skilled trades	26%	60%	-9%	5%	8%	40%	15%	42%	50%	49%	18%	47%	47%	42%	-16%	0%	24%	45%	61%
Personal services	15%	46%	-3%	2%	8%	38%	26%	32%	55%	59%	16%	43%	53%	50%	-8%	2%	33%	47%	58%
Sales and customer service	30%	60%	-4%	-7%	-7%	34%	30%	29%	42%	38%	10%	44%	34%	32%	-20%	-5%	23%	34%	40%
Process, plant and machine Op's	39%	42%	-11%	-3%	11%	31%	20%	32%	42%	47%	16%	40%	44%	30%	-16%	3%	31%	47%	55%
Elementary	29%	53%	4%	2%	10%	31%	30%	36%	42%	53%	22%	47%	39%	43%	-15%	-11%	18%	41%	55%
Total	27%	46%	-6%	-1%	7%	37%	23%	33%	43%	48%	11%	47%	53%	39%	-16%	-1%	26%	46%	56%

