

October 2016

Derry and Strabane District Council

Community Plan capital expenditure
forecasting and analysis



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Overview

UUEPC have developed a Local Economic Forecasting model as part of the Local Government sponsorship package. The Centre produces bi-annual forecasts for each of the eleven Council areas in NI. The UK forecasts cascade from the Cambridge Business Research team and the Centre’s NI forecasting model.

The Local Economic Forecasting model includes baseline, Corporation Tax and “upper” scenarios. The upper scenario was developed in order to illustrate the type of economy NI might aspire to. A post ‘Brexit’ scenario will be developed during Autumn 2016.

Derry and Strabane District Council are currently developing their Community Plan, which includes a range of projects that are planned from 2016 – 2025 within the Council area. These reflect the ambition for the locality and naturally, will include projects that are at various stages of development from scoping, to appraisal, approval and implementation.

Community Plan economic model

As part of the Derry and Strabane DC sponsorship package, UUEPC have developed an economic modelling system, which estimates a new “ambition” scenario, outlining the likely economic potential for the Council area. The inputs to the model (employment and expenditure) are provided by Derry City & Strabane District Council. Using these input as a basis, the model produces sectoral employment, GVA, skills, commuting, fiscal impacts and CO² emissions, encompassing the direct impacts as provided by the council and the indirect (supply chain) and induced effect (spending impacts) of the projects contained within the Community plan.

Brief description of model

The outputs of the model are dependent upon the project list and the direct expenditure and employment estimates which are provided by the Derry and Strabane DC Community Planning team and reference to these numbers should be attributed as such. The modelling and indirect and induced effects are produced by UUEPC and can be sourced to the Centre. The inputs provided by Derry and Strabane DC are detailed in the table below.

	2015 - 2030
Capital expenditure	£3.6bn
Direct jobs resulting from capital projects	7,770
Direct jobs resulting from programmes	490
Total direct employment	8,260

The next step of the modelling was to agree and apply a sectoral breakdown of the jobs provided within each project. This sectoral breakdown is hugely important to the model for two things:

1. It determines the indirect effect of projects through the use of Input-Output modelling; and
2. Forms the basis of the skills element of the model¹.

¹ Skill requirements by sector are applied using the UUEPC skills barometer, this then determines the net skills requirements for projects included within the Community Plan. See ‘Skills profile by sector’ in the technical annex for full details.

Construction employment was calculated by applying a construction turnover to employment ratio using the NI Annual Business Inquiry².

When the capital expenditure, jobs and sectoral breakdowns were provided, jobs were converted to GVA by applying Derry and Strabane DC sectoral productivity figures and next, converting GVA to output by applying NI ABI sectoral GVA to turnover ratios. This allowed for the calculation of indirect effects using Scottish Input-Output tables.

Once the direct and indirect effects were calculated, total income generated from the net additional jobs (direct and indirect) was calculated using Derry and Strabane DC sectoral wage forecasts. Again, Input-Output tables were used as a basis to determine how this additional income was spent, allowing for the calculation of induced effects.

Expenditure effects of the net additional students associated with the University Expansion are also included within the model. Their spending was incorporated by using Input-Output modelling to convert expenditure to GVA, and GVA into employment.

It is important to note that in developing the model, adjustment mechanisms were put in place to account for;

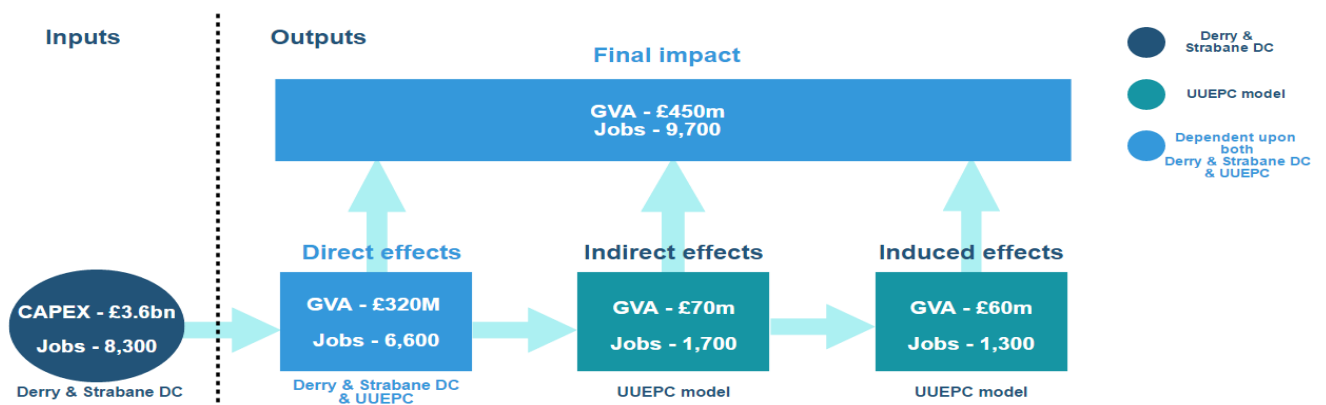
- Those jobs that were considered to be indirect or induced effects of other projects were excluded to minimise double counting of impacts;
- Location quotients were used as a basis to determine which effects would be retained within the Council area;
- Skills influence upon commuting patterns and the individuals removed from the unemployment or inactivity register; and
- Profile of wage increases.

The outputs of the model described allowed for other elements to be incorporated within the analysis such as emissions, tax revenue and net skills requirements.

Summary of Community Plan capital projects economic impact

The capital projects listed within Derry and Strabane DC’s community plan have the potential to generate a significant economic impact upon the local area. The infographic below illustrates the inputs, their source and the economic outcomes of full implementation of the Community Plan within the proposed timescales.

Key economic indicators in Derry City and Strabane DC Community Plan, 2025



² Construction turnover to employment ratio calculated at £128,722 for 1 employee.

The table below illustrates the impact of the Community plan on key economic indicators, as calculated by the economic model relative to baseline forecasts to provide context.

Key economic indicators in Derry and Strabane DC, baseline and Community Plan scenarios

	2015	2020	2025	2030
Population (baseline)	149,700	152,500	153,900	154,700
Employment (baseline)	61,100	61,200	63,200	65,700
GVA £m (baseline)	2,300	2,500	2,700	3,000
Population (Community Plan)	149,700	154,100	157,300	158,500
Employment (Community Plan)	61,100	66,900	72,800	75,800
GVA £m (Community Plan)	2,300	2,800	3,200	3,500
Population (Community Plan – net additional)	-	1,600	3,400	3,700
Employment (Community Plan – net additional)	-	5,700	9,700	10,100
GVA £m (Community Plan – net additional)	-	300	500	500
Population % growth from baseline	-	1.0%	2.2%	2.4%
Employment % growth from baseline	-	9.4%	15.3%	15.4%
GVA % growth from baseline	-	10.1%	16.6%	16.4%

Source: UUEPC modelled estimates of the Community Plan inputs as provided by Derry & Strabane District Council Community Planning Team

Community Plan interdependency matrix

In addition to the economic model, the Centre has constructed an interdependency matrix which provides a qualitative assessment of the Community Plan. This is a live template and can be completed by a range of individuals to incorporate their professional assessment. Whilst the economic model is useful in aggregating the impact of the individual projects, it does not take into consideration how dependent the success of the projects will be upon other projects such as skills and transport etc. The aim of the interdependency matrix is to provide an assessment of the Community Plan as a whole.

Risk assessment and caveats

Caveats

This paper provides a range of evidence and a logical, joined-up approach to considering the range of projects within the Community Plan. The benefit of this approach is that it demonstrates in a systematic manner, how and where specific skills may be sourced for certain employment opportunities and how they may impact within the council area. However, there are a number of caveats to be aware of in the use of the outputs provided in this paper.

The current employment estimates within the capital project list, as provided by DC&SDC need careful consideration to ensure the list is as reliable as possible. The modelled estimates are credible only if the inputs are reasonable. To ensure this we have:

- 1) Discussed and agreed with DC&SDC the sectoral mix of projects; and
- 2) DC&SDC have confirmed that projects are wholly additional to what is already underway, or would be carried out in the normal business of Council or other Government agencies or Departments, as these impacts will already be factored into the baseline projections.

Ambitious scale – outputs of analysis

The purpose of modelling the potential economic impacts of the Community Plan is to:

- set out the ambition is for how the economy in DC&SDC could look in 2030;
- list the projects that are required to deliver this ambition;
- how the outputs of these projects each contribute to delivering the ambition; and
- identify key risks and mitigating factors to reaching the ambition.

The Community Plan includes more than 200 projects, a total of 10,100 associated jobs and capital expenditure of £3.6 billion. The largest expenditures within the plan relate to infrastructure, hospital redevelopment and the University expansion. Other key elements of the plan include regeneration, sustainability, key strategic development sites and the provision of parks, play and greenways.

The outputs of the Community Plan are ambitious and, whilst this is welcome, it is important to recognise the challenge in realising such a transformational change.

To provide context, the employment, supply chain and spending effects would result in additional employment of 10,100, which is 16.4% above the 2030 UUEPC baseline forecast for the Council and would entail overall growth of 25% from 2015. As illustrated in the table below, the rate of growth is close to growth rates achieved by Dublin in the period 2000-2015.

Employment growth, comparator cities/city regions, 2000 - 2015

Country/region	Employment growth 2000-2015
Austin TX	39.2%
Geneva	35.7%
Houston TX	31.0%
Malaga	29.3%
Toronto	29.1%
Dublin	20.5%
Dallas-Fort Worth TX	20.3%
Rome	19.1%
London	18.9%
Brighton	17.6%

Source: Oxford Economics

At a sectoral level, realising the Community Plan would mean that the concentration of employment in four sectors would see these move into the top 10 performing Local Enterprise Partnerships.

These are:

- ICT – moving from a rank performance of 14 to 10;
- Education – from 20 to 7;
- Arts and entertainment – from 20 to 9; and
- Other services from 19 to 5.

Other sectors which are currently, and will remain in the top 10 are agriculture, public admin and health.

The increase in employment will, as expected, have a significant impact upon the level of unemployment within the Council area. By 2030, the unemployment rate should, if the ambition is realised, decrease from 6.6% to 3.3%. This moves the Council to the same rate as the NI average.

Risk assessment

The process of building the economic model, analysing the inputs and resources that are required for the Community plan reveals a number of key risks for Community Planners to be aware of. In order for the modelled outputs to be achieved, **all** of the risks outlined below must be mitigated. The comprehensive overview is a key benefit of this type of economic modelling. Key risks identified are as follows;

- **Scale of change** – whilst the transformational ambition at the centre of the Community Plan is to be lauded it is important to draw attention to the projected scale of the change. If all of the risks are met this would see the Council area grow ahead of the rates achieved in many comparable city regions. The growth rate, while achievable, would be unprecedented in the city's history.
- **Skills supply** – the profile of skills requirements within the forecast additional employment does not match well with the skills of those who are currently out of work within the Council Area. The successful delivery of the plan is dependent upon significant upskilling of the local population as well as migration and commuting into the area in order to fill additional employment opportunities within the plan.
- **Consumption expenditure** – the plan is heavily reliant on consumer expenditure and will rely to a large degree on cross border, tourism and expenditure from those living in other council areas to deliver upon plans for the retail and accommodation sectors.

- **Funding** – the capital expenditure programme is particularly ambitious, totalling £3bn of expenditure. Whilst these are multi-year plans and include private sector expenditure as well as public, for context, the total Departmental Capital DEL is set at £1.2bn for the NI Executive for 2016-17³. Some projects are approved and others are at concept, appraisal or approval stage. Failing to secure funding, securing lower amounts or delaying the expenditure associated with these capital projects will lead to a smaller, later, or smaller and later impact as a result of the Community Plan.
- **Sub-regional development** – to follow on from the funding risk noted above, the demand for funding within the plan presents a risk of inequitable dispersion of funds across NI. Given scarcity of funding and competing resources, achieving this level of funding would result in a lower amount available for other areas within NI.
- **Profiling and timing of projects** - plans for expenditure appear to be focussed in 2016-19 in particular. A range of factors may be at work including the desire of project promoters to bring forward many projects quickly, or uncertainty in terms of projects that might be required in 4 – 10 years-time. However, consideration of the timing of some projects may help with securing the required capital expenditure.
- **Inclusive growth** – many of the employment opportunities are at level two and above, which means that those who have no qualifications are likely to face significant challenges in securing employment unless they are upskilled. Delivery of the Community Plan will result in local economic growth, however, at ward level, the most deprived and correspondingly low skilled wards will require additional policy interventions. To mitigate against this risk and promote inclusiveness and equality of employment opportunities within the Community plan, Derry & Strabane DC aim to put in place mitigation measures through their skills pilot programmes.
- **Desirability and infrastructure** – the success of the Community Plan is highly dependent on programmes relating to desirability and infrastructure being implemented. There is a need identified for more people to move into the Council area to take up employment opportunities. The overall attractiveness of the area (in terms of housing, schools, shopping, infrastructure, public realm and civic amenities will be important to those who may consider relocating to the area.
- **'Brexit' impact** – the decision for the UK to leave the European Union has led to uncertainty surrounding economic outlook for DC&SDC. There are many unknowns surrounding issues such as trade agreements, funding, and migrants all of which are critical to the success of the Community Plan.

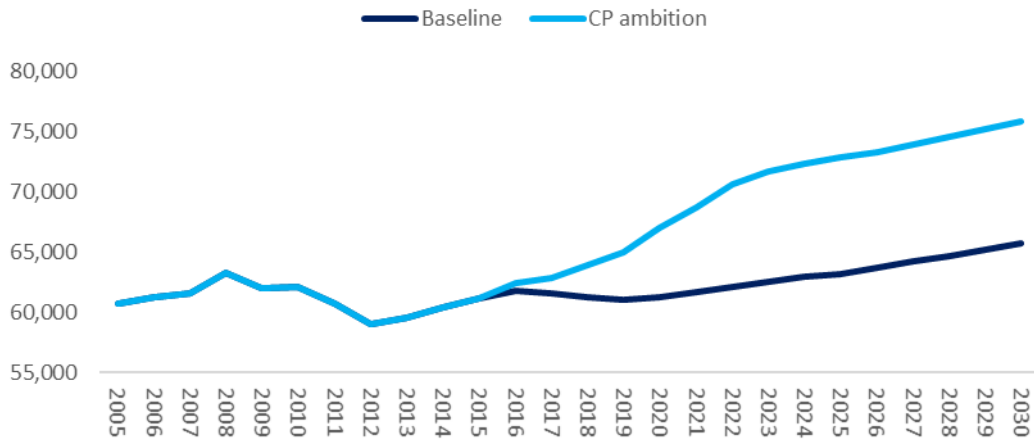
When reading through the results contained within this report, it is important to be mindful of the caveats and risks identified.

³ NI Executive, Budget 2016-17.

Summary of employment impacts

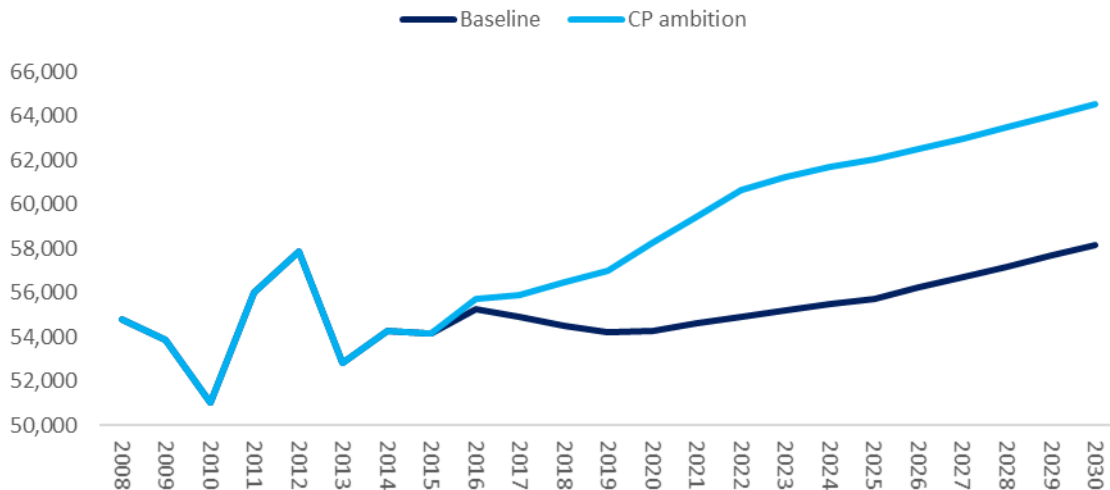
This element of the report presents the UUEPC baseline forecasts for key economic indicators and a “Community Plan ambition scenario”. The scenario has been developed to illustrate the potential magnitude of change, if all capital projects within the Community Plan are completed to scale and on time. The projects included within the scenario have been identified using the Community Plan Capital project list which was provided by Derry and Strabane DC in September 2016.

Workplace based employment, baseline vs community plan ambition, 2005 - 2030

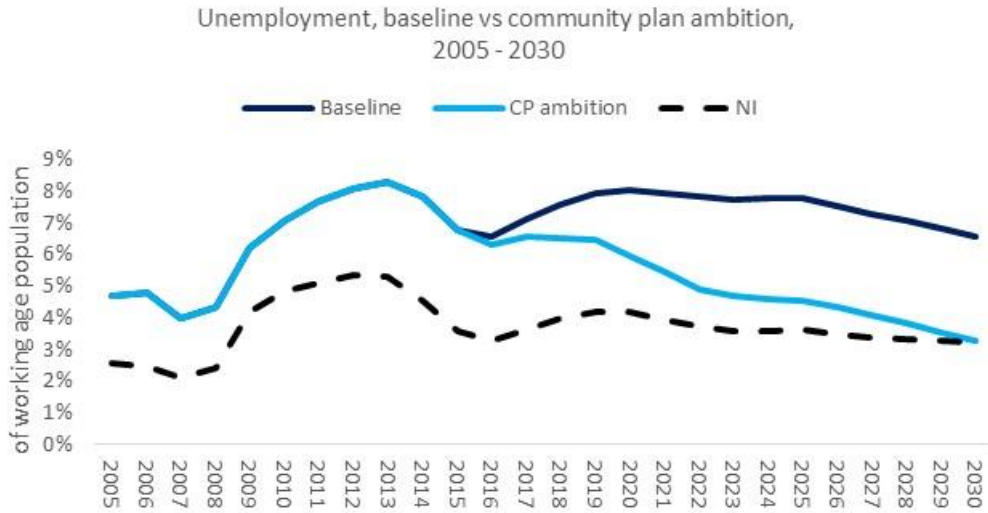


Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

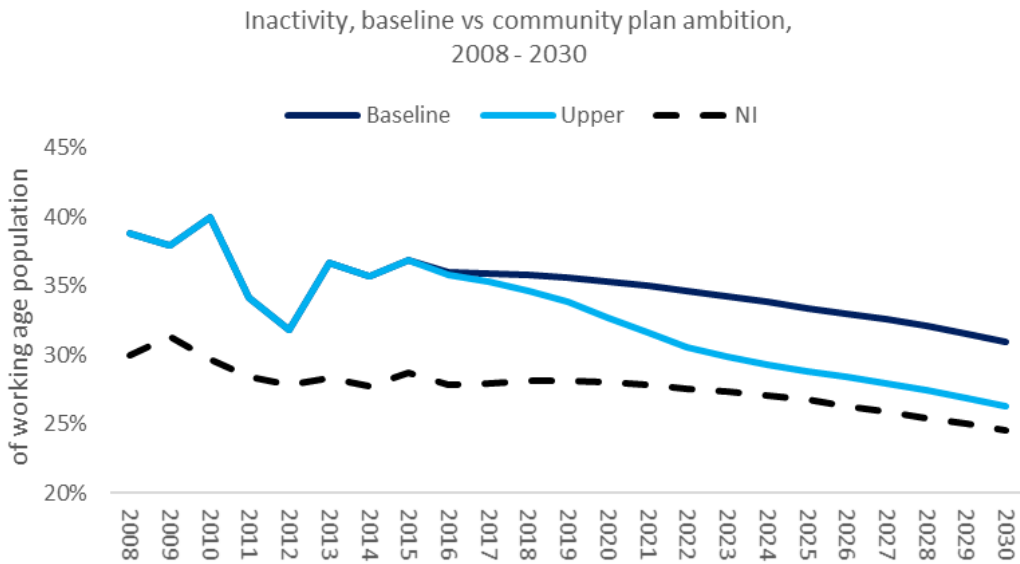
Resident based employment, baseline vs community plan ambition, 2008 - 2030



Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team



Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team



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Labour market: sectoral analysis

The sectoral employment opportunities that will be provided by the capital projects contained within the community plan are important as they drive the demand for specific types and levels of skills. The greatest sectoral increase is in Professional Services, with high wage, skill and productivity jobs that are capable of generating significant downstream effects as these individuals spend their wages.

Employment by sector, 2015 – 2025, baseline and Community Plan forecasts

Sector	Baseline		CP ambition	Net additional
	2015	2025	2025	2025
Agriculture	2,400	2,400	2,500	100
Mining and quarrying	50	50	50	0
Manufacturing	5,100	4,900	5,300	400
Utilities	100	100	100	0
Water supply & waste	400	400	400	0
Construction	3,700	3,900	4,000	200
Retail	10,600	10,800	11,800	1,000
Transportation	1,600	1,800	2,300	500
Accommodation	3,500	3,800	4,700	900
Information & Comm's	1,900	2,400	3,400	1,000
Financial activities	1,300	1,300	1,900	600
Real estate	600	600	800	200
Professional & scientific	1,700	2,100	3,400	1,300
Administration services	4,100	4,800	5,400	600
Public Admin' & defence	4,400	3,900	4,200	300
Education	6,300	6,100	6,900	800
Health & social work	10,600	10,800	11,300	500
Arts and entertainment	1,400	1,700	2,100	500
Other services	1,300	1,400	2,200	900
Total	61,100	63,200	72,800	9,700

Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Employment change by sector, 2015 – 2025, baseline and Community Plan forecasts

	Increase in sector (%), 2015 - 2025		
	Baseline	CP ambition	P.P. Difference
Agriculture	1%	7%	5%
Mining and quarrying	0%	3%	3%
Manufacturing	-3%	5%	8%
Utilities	0%	4%	4%
Water supply & waste	0%	4%	5%
Construction	5%	9%	4%
Retail	2%	11%	9%
Transportation	11%	42%	31%
Accommodation	7%	32%	24%
Information & Comm's	27%	79%	52%
Financial activities	2%	48%	45%
Real estate	12%	40%	28%
Professional & scientific	20%	96%	76%
Administration services	15%	30%	15%
Public Admin' & defence	-11%	-4%	7%
Education	-4%	9%	13%
Health & social work	1%	6%	5%
Arts and entertainment	24%	58%	34%
Other services	5%	74%	68%
Total	3%	19%	16%

Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

GVA & wages

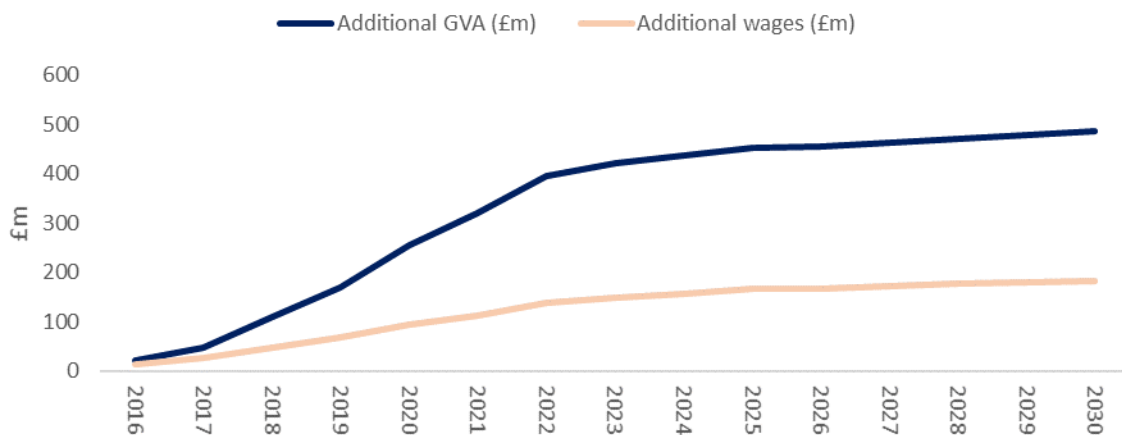
Gross Value Added (GVA) is one of the most widely used economic indicators as it measures the value of output produced by the economy that year, or quarter. In more simple terms, GVA can be thought of as the value of all wages and profits generated. At a local level, measurement is problematic given that profits are not always declared or retained in the local labour market. As a result, the consideration of wages generated in the area is generally more helpful when modelling local economic impacts.

GVA, GVA growth and wages, baseline and Community Plan forecasts

	GVA (£m) 2025	2015 - 2025 CAGR	Workplace wages (£m), 2025
Baseline	2,300	1.6%	1,600
CP ambition	3,200	3.4%	1,800
Difference	900	1.7 pp	200

Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Additional wages and GVA within community plan ambition, 2016 - 2030



Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Salaries

The sectoral mix of additional employment that is contained within the Community plan is, on average, more highly skilled than the existing sectoral composition. By 2025, it is expected that the average wage for the additional jobs will be c£28,000 per annum, above the NI average forecasted wage of £27,600, but lower than Belfast's £32,000. The overall impact is that delivery of the projects within the community plan are expected to raise the average wage in the region to almost £26,000 by 2025. This wage inflation is driven primarily by the skilled ICT and professional service sectors.

Average mean salary by sector, 2025, baseline vs net additional jobs within CP ambition

	Baseline	Net jobs within CP ambition	CP ambition overall impact
Agriculture	£16,400	£16,400	£16,400
Mining and quarrying	£30,400	£30,400	£30,400
Manufacturing	£31,200	£34,400	£31,500
Utilities	£42,700	£42,700	£42,700
Water supply & waste	£29,500	£29,500	£29,500
Construction	£27,300	£28,700	£27,400
Retail	£18,800	£19,800	£18,900
Transportation	£32,300	£33,900	£32,600
Accommodation	£11,700	£12,300	£11,800
Information & Comm's	£32,100	£38,500	£33,900
Financial activities	£37,000	£37,000	£37,000
Real estate	£23,500	£24,700	£23,800
Professional & scientific	£26,200	£31,400	£28,200
Administration services	£19,900	£21,900	£20,200
Public Admin' & defence	£41,300	£41,300	£41,300
Education	£32,600	£32,600	£32,600
Health & social work	£26,800	£26,800	£26,800
Arts and entertainment	£17,900	£18,800	£18,100
Other services	£15,900	£16,700	£16,300
Overall average wage	£25,500	£28,000	£25,700

Source: UUEPC analysis of ASHE, & modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

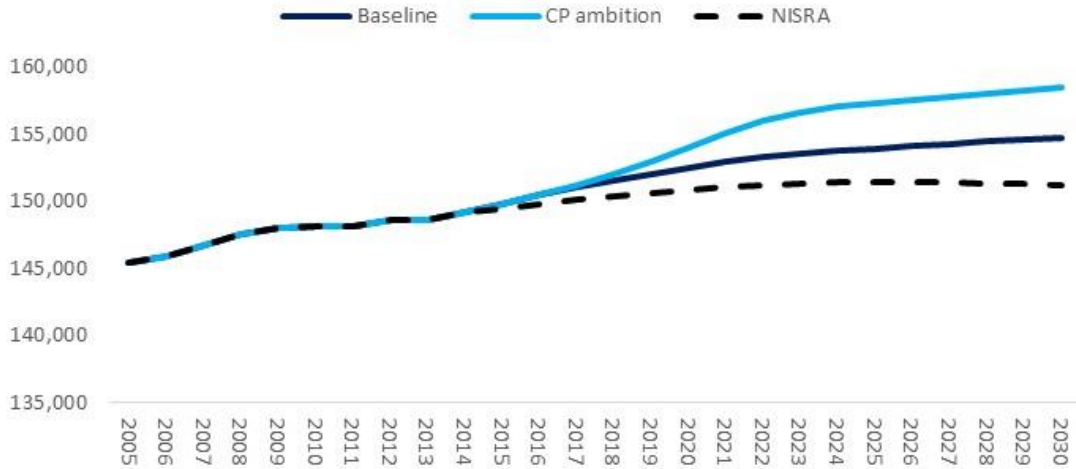
Demographics and commuting

The Capital projects within the community plan are expected to deliver a range of jobs, some two thirds of which will fit with the skills profile (assuming that upskilling takes place) of council area inhabitants and one third which are expected to be filled by commuters and migrants.

The Centre's baseline population forecasts are above the NISRA estimates due to a more vibrant labour market. If NISRA's lower projections come to pass, this would likely lead to lower employment than in the UUEPC baseline. However, the UUEPC local model assumes (as is usually borne out in the real world) that migration will respond to the labour market demand.

The increase in population can be attributed to migrants being attracted into the area as a consequence of the new employment opportunities provided. Overall, it is expected that 17% of the net additional jobs will be filled by migrants. It is important to note that the number of jobs will be slightly higher than the number of individuals due to the fact that one person can take more than one job. As such, a ratio of 0.97 has been applied to the total number of net jobs to account for multiple jobs i.e. jobs per person.

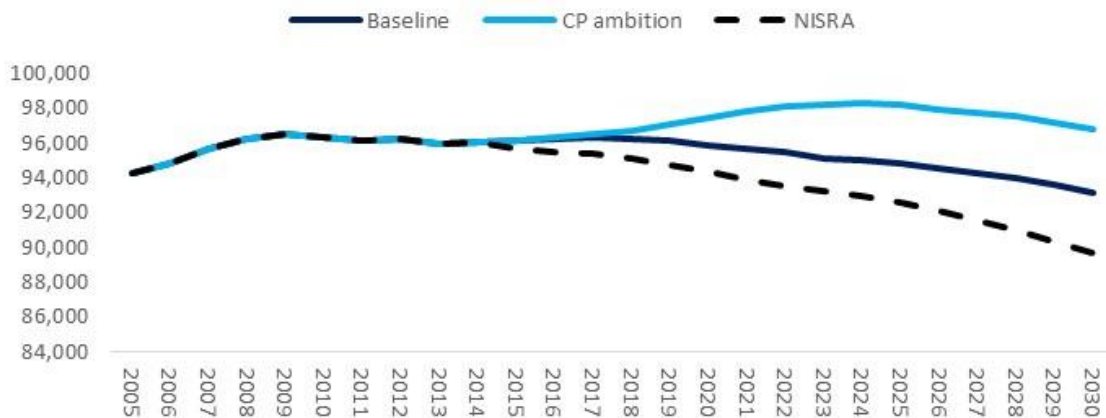
Total population, baseline vs community plan ambition, 2005 - 2030



Source: NISRA, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Note: International students resulting from the University expansion figures have been included within population calculations

Working age population (aged 16-64), baseline vs community plan ambition, 2005 - 2030



Source: NISRA, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Note: International students resulting from the University expansion figures have been included within population calculations

Source of jobs (residents, migrants and commuters), 2025

	Total	%
Residents	6,300	67%
Migrants	1,600	17%
Commuters	1,500	16%
Total	9,400	100%

Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Notes: Commuting patterns are held constant at 2011 levels, adjusted for skill level of the jobs (higher commuting intensity for high skilled jobs as evidenced in the census data). Migrant element uses the current migrant intensity by sector, although this is likely to vary over time and as a result of policy changes such as Brexit.

Skills

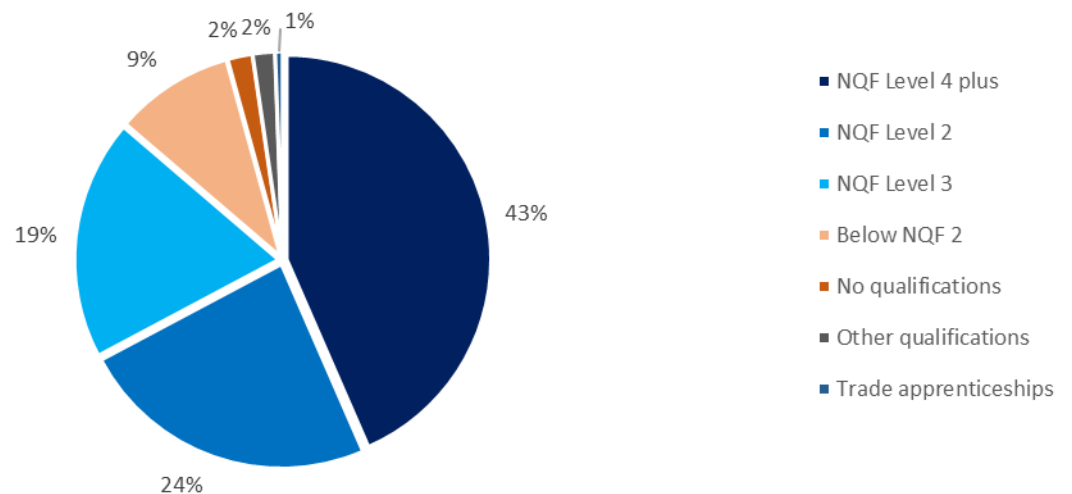
The forecast skill profile of the additional employment opportunities (which is informed by UUEPC Skills Barometer research⁴) does not match well with the existing skills of those within the DCA who are not currently employed⁵. This presents a very significant risk to the overall plan. At present, it is assumed that two thirds of the employment will be taken up by residents, although this will require significant upskilling, or alternatively higher levels of immigration or commuting into the DCA.

Projected skills profile of net additional jobs (2025)

Qualification level	Net additional jobs	%
No qualifications	200	2%
Other qualifications	200	2%
Below NQF 2	900	9%
NQF Level 2	2,300	24%
Trade apprenticeships	100	1%
NQF Level 3	1,800	19%
NQF Level 4-5	1,000	11%
NQF Level 6	2,200	23%
NQF Level 7	800	9%
NQF Level 8	100	1%
Total	9,700	100%

Sources: LFS, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

CP ambition, net additional jobs by skill level, 2025



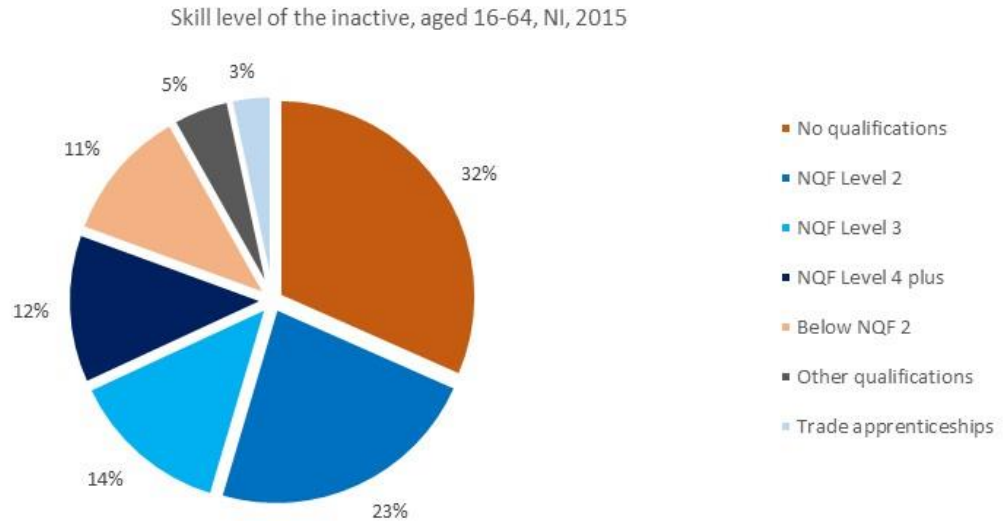
Sources: LFS, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

⁴ https://www.ulster.ac.uk/_data/assets/pdf_file/0007/73528/Skills-Barometer-Final-Full-Report.pdf

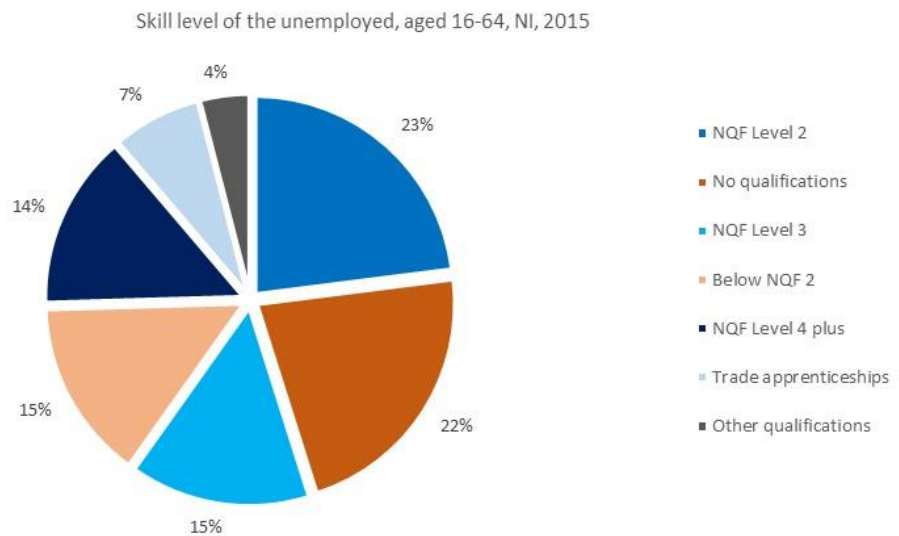
⁵ Based on 2011 census, adjusted for the skills mix within UUEPC barometer research

The skills profile of the economically inactive can be measured by the Labour Force Survey, though it is worth noting that the LFS is subject to relatively high margins of error due to small sample sizes. The chart below provides data for NI (DCA data presents significant challenges due to very small sample sizes). It illustrates that almost a third of the inactive have no qualifications and almost a quarter have level two qualifications. Only one in five have a qualification that is level four or above.

As a result, the jobs at level two and three may be filled from those who are currently economically inactive or unemployed, although the more highly skilled jobs are likely to be filled by those from outside the DCA or by migrants, unless significant upskilling occurs.



Source: UUEPC analysis of LFS
 Note: % lower than 1% have been removed from the chart i.e. NQF level 8



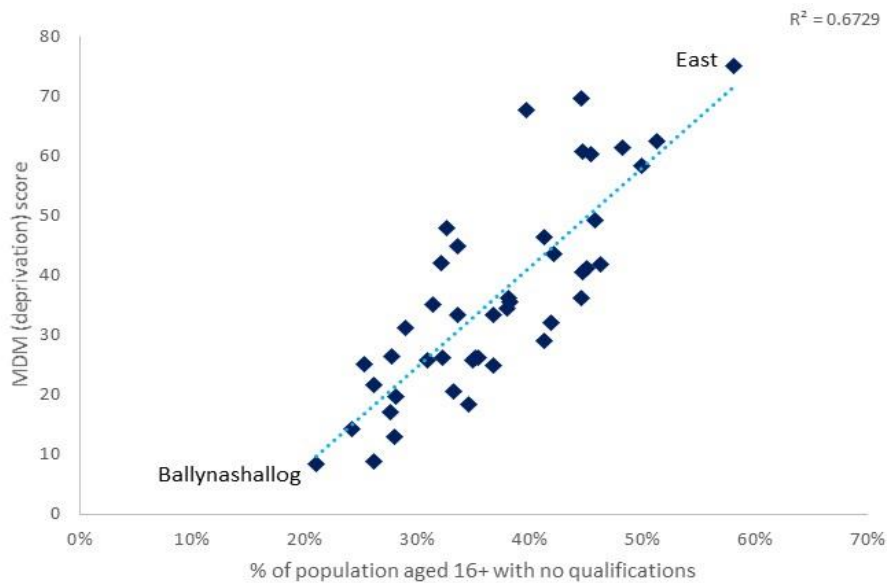
Source: UUEPC analysis of LFS
 Note: % lower than 1% have been removed from the chart i.e. NQF level 8

Potential impact upon deprived areas

A key strand within the Community Plan relates to inclusive growth, in order to share the benefits of stronger economic growth across the community. An examination of the skills profile of the additional employment opportunities reveals that just 2% will be available to those with no qualifications. Evidence from the 2011 NI census demonstrates (illustrated in the chart below) that in the most deprived wards a large proportion of the population have no qualifications. Whilst the information is dated, the general relationship between the two indicators is unlikely to have changed significantly to 2016.

As a result, the additional jobs within the plan are unlikely to be filled by those who currently reside within the most deprived wards within DC&SDC. As stated previously, significant upskilling will be required to facilitate the plan in having an impact upon deprived wards and a significant risk exists in terms of delivering on the inclusive growth element of the Community Plan.

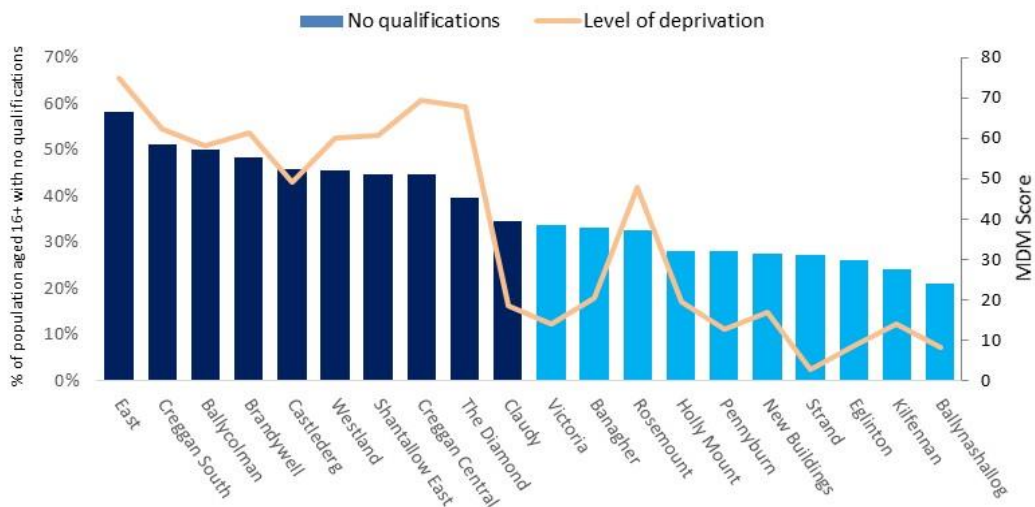
Relationship between level of deprivation and having no qualifications, DC&SDC wards, 2011



Source: NI Census 2011

The chart below highlights the 10 wards within DC&SDC with the largest proportion of the population with no qualifications in contrast to the 10 with the smallest proportion, alongside their respective level of deprivation.

Percent of population (16+) with no qualifications, highest 10 vs lowest 10, & deprivation score, DC&SDC wards, 2011

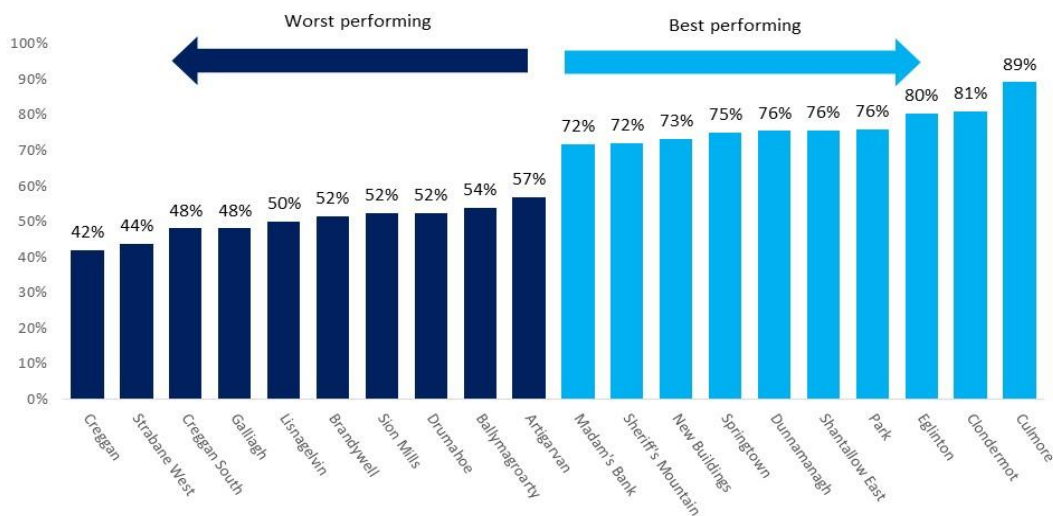


Source: NI Census 2011

Additions to the current stock of skills

It is important to analyse the performance of schools as the inflow of school leavers to the working age population is one way to improve the composition of available skills in the local labour market. It is important to note however that a significant outflow of skilled individuals does impact significantly upon the labour market composition. Whilst the area has a number of high achieving schools, the chart below illustrates that wards such as Creggan South and the Brandywell, which already have a large proportion of the population with no qualifications are amongst the worst performing in terms of GCSE achievement. At the other end of the spectrum Eglinton and Newbuildings have a low proportion of the population with no qualifications and are amongst the best performing in terms of GCSE achievement. Again, with limited employment opportunities for those with no qualifications and more than half of school leavers failing to attain 5 GCSEs A*-C inc. English and Maths, it will be a significant challenge for the Community Plan to deliver sustainable economic growth in the most deprived wards.

School leavers achieving 5+ GCSEs A*-C inc. GCSE English and maths, DC&SDC wards, 2014



Source: Department of Education NI

Emissions

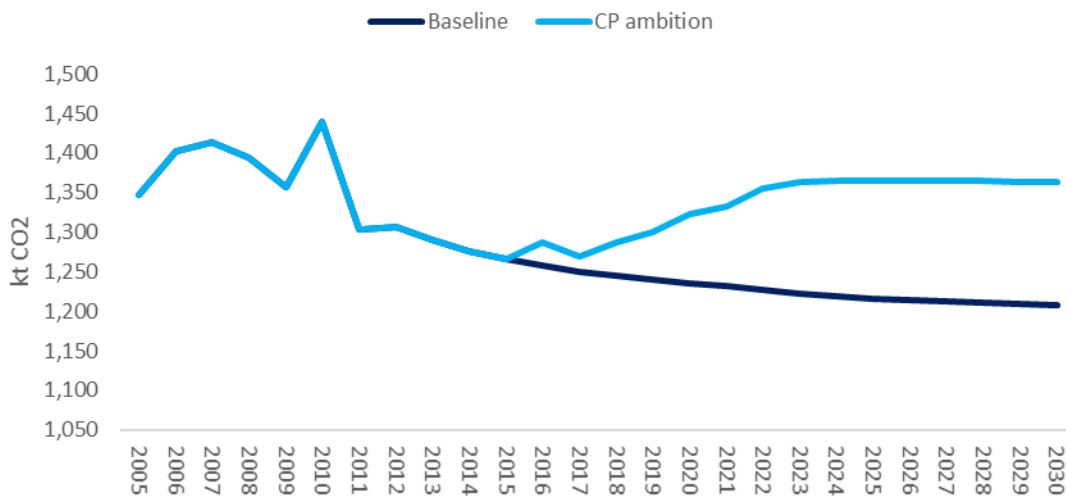
Emissions forecasts have been developed on the basis of the output generated by sector in NI and existing emissions by broad sector. Emissions forecasting can be challenging as data is only available at a very broad sectoral level. Emissions depend upon the activity of specific firms and a small number of large industrial users can have a significant impact.

CO² emission estimates, kt's, 2025

	Baseline	CP ambition	Additional emissions
Industrial/commercial	380	440	60
Transport	280	320	40
Other	170	200	30
Domestic	280	290	10
Agriculture	40	40	0
Large industrial	70	70	0
Total	1,220	1,360	140

Source: DECC, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

CO₂ emission estimates, kt CO₂, baseline vs community plan ambition, 2005 - 2030



Source: UUEPC analysis of Local CO₂ emission estimates, DECC & UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Selected revenue streams

Additional economic activity will generate additional tax revenue via a range of streams. The majority of Taxes are administered at national level and therefore, the majority of additional revenue will accrue to Whitehall and can be used to fund public services. Rates are a devolved power and are administered by LPS with the revenue being split between Councils and the NI Executive for Departmental expenditure.

Forecasts illustrate that additional tax revenue should be c£100m by 2030 for national taxes and £10m in additional rate revenue, part of which will accrue directly to Derry & Strabane District Council.

Net additional revenue (£m)

	2020	2025	2030
Income tax	14	25	28
VAT	13	25	31
NICs	10	19	23
Corporation tax	4	7	8
Total national	42	77	90
Domestic rates	0	0	1
Non-Domestic rates	5	9	9
Mixed rates	0	0	0
Total local	5	9	10
Overall	47	86	100

Source: UUEPC analysis of HMRC, LPS & modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Notes: Income tax calculations based upon net additional wages generated as a result of Community Plan inputs
 VAT and NICs calculations based upon consumer expenditure generated as a result of Community Plan inputs. The NI consumer expenditure to income ratio is applied to the income generated as a result of Community Plan
 Corporation tax calculations based upon net additional GVA generated as a result of Community Plan inputs
 Domestic rates calculations based upon net additional population as a result of Community Plan inputs.
 Non-domestic and mixed rates calculations based upon net additional GVA as a result of Community Plan inputs.

Total national revenue generated is applied to all net additional employment and wages as this will be collected by the national government irrespective of where the tax is paid. Local revenue raised has been applied to only the economic activity retained within DC&SDC (business rates) as well as the net additional population within DC&SDC (domestic rates).

Assessing the magnitude of change

This element of the report assesses the magnitude of change against UK Local Enterprise Partnerships (LEPs). The LEPs act as a 'yardstick' which is useful in order to test how plausible the forecast employment structure of DC&SDC as a result of the community plan. Sectoral employment as a proportion of the working age population has been used to rank DC&SDC against the LEPs in GB. The table below shows the current ranks of DC&SDC by sector, the expected rank in 2025 in the baseline scenario and the expected rank in 2025 in the Community Plan ambition scenario.

The addition of more than 800 jobs in the education sector causes DC&SDC's LEP position to jump from 20 in the 2025 baseline, to 7 which is a significant improvement over the period.

The table below highlights the impact of the community plan ambitions by sector. In the private sector, the most notable changes are in Arts and Entertainment, financial services and accommodation (restaurants and hotels). Retail and information and communications improve upon an already strong position and construction remains relatively strong despite a marginal decline.

Public administration remains the largest in proportionate terms of the LEP's and health improves from an already strong position. Education is the strongest performing sector in the plan, as the Magee Campus expansion has the potential to increase employment in the sector by a significant amount. This also draws attention to the fact that the Community plan is to a reasonable degree, dependent on public sector funding and expansion, which will have indirect and induced effects for elements of the private sector such as retail, accommodation and in communications.

By 2025, the Council would move into the top 10 LEP's for ICT, education, arts & entertainment and other services concentration, but is still relatively weak with regard to professional services and administration services.

DC&SDC rank against Local Enterprise Partnership areas, 2025

	DC&SDC baseline 2025 (rank out of 40)	DC&SDC CP 2025 (rank out of 40)	Difference in 2025 baseline vs CP
Agriculture	1	1	0
Mining and quarrying	19	19	0
Manufacturing	28	28	0
Utilities	38	38	0
Water supply & waste	29	29	0
Construction	13	13	0
Retail	28	24	4
Transportation	37	34	3
Accommodation	32	25	7
Information & Comm's	14	10	4
Financial activities	24	15	9
Real estate	40	37	3
Professional & scientific	40	36	4
Administration services	32	28	4
Public Admin' & defence	1	1	0
Education	20	7	13
Health & social work	7	5	2
Arts and entertainment	20	9	11
Other services	19	5	14
Total	35	17	18

Source: BRES, NOMIS, UUEPC analysis & modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Interdependencies

It is clear that achieving the economic outcomes illustrated in this paper will be dependent on a range of projects being implemented in full and on time. For example, infrastructure investments will act as enablers for a range of other projects and these may not be as successful if the infrastructure projects are delayed or do not take place.

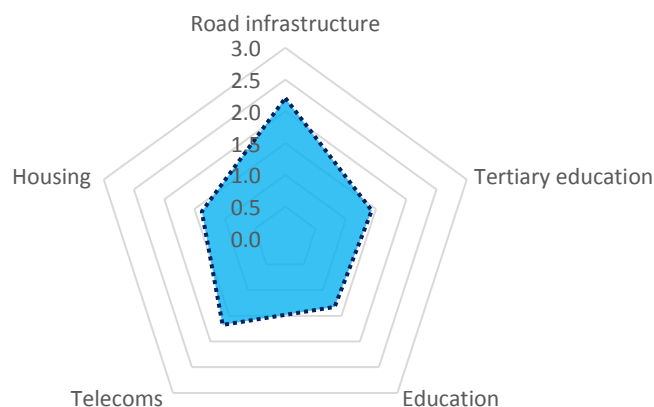
The projects proposed within the Community Plan demonstrate an ambition to improve social, environmental and economic performance across the whole of the Derry and Strabane District Council area. Ambition on a scale that proposes almost 200 projects will require significant effort and investment. In addition, the success of many projects is dependent on the delivery of other key strategic projects – for example, the delivery of significant road improvements will impact on the region’s ability to develop key economic development projects and amplify the impact of development projects such as Ebrington. The ‘interdependencies’ of each project against the following items have been assessed subjectively:

- Infrastructure
- Expansion of HE provision (tertiary education)
- The provision of primary education
- The availability of high quality telecoms
- The availability of sufficient, quality housing

How dependent each proposed project is on these factors has been assessed on a scale of one to three and a ‘traffic light’ scale with green indicating a high level of interdependence and red indicating a low level. All projects have been assigned an equal weight i.e. no project is more important than another. At present, the assessment of the interdependency of projects is from a purely economic perspective. However, the system has been developed in order that a range of individuals from different professions and perspectives can add their input. As such, additional qualitative assessments can be included as required by DC&SDC.

Perhaps unsurprisingly, given their role as key enablers of economic growth (and the nature of the majority of proposed capital projects), the results suggest that community plan projects are most reliant on road infrastructure and telecoms. The provision of quality education, while vital at a macroeconomic level is not considered to be a constraining factor in terms of the interdependence of the proposed community plan projects, scoring an average of 1.5 out of 3 across all projects.

Degree of interdependence of projects within the Derry & Strabane DC Community Plan



D&S DC provided UUEPC with a list of Capital projects which were arranged within 15 themes. A summary of the results by project themes is included in the table below.

Theme	Interdependency				
	Road infrastructure	Tertiary education	Education	Telecoms	Housing
1. URBAN/RURAL REGENERATION	●	●	●	●	●
2. COMMUNITY/NEIGHBOURHOOD REGENERATION	●	●	●	●	●
3. DCSDC CONSTRUCTION/REFURBISHMENT	●	●	●	●	●
4. EDUCATION	●	●	●	●	●
5. HOUSE BUILDING PROGRAMME up to 2025	●	●	●	●	●
6. HEALTH	●	●	●	●	●
7. EBRINGTON	●	●	●	●	●
8. FORT GEORGE	●	●	●	●	●
9. RIVERSIDE	●	●	●	●	●
10. OTHER STRATEGIC DEVELOPMENT SITES	●	●	●	●	●
11. EXISTING CAR PARKS WITH DEVELOPMENT POTENTIAL	●	●	●	●	●
12. INFRASTRUCTURE	●	●	●	●	●
13. SUSTAINABILITY - ENERGY - RECYCLING	●	●	●	●	●
14. SPORTS/LEISURE	●	●	●	●	●
15. PARKS, PLAY AND GREENWAYS, OTHER	●	●	●	●	●

Source: Ulster University

It is important to note that ‘red lights’ are not a critique on the value of projects, rather an opinion on how dependent each proposal is on the indicator, hence Telecoms and Roads infrastructure are reported as being more critical to the successful delivery of each theme than, say, housing.

Looking behind the headline themes suggests a significant degree of interdependence within the larger scale, strategic projects that have been proposed in the community plan. The table below shows the 10 most dependent projects. Foyle college and the University expansion are most dependent on other factors for success.

Project description	Road infrastructure	Tertiary education	Education	Telecoms	Housing
Foyle College	●	●	●	●	●
University Expansion excl. accommodation 2636 FTE	●	●	●	●	●
NWRC Phase 6 Springtown Campus/Strand 750 FTE	●	●	●	●	●
NWRC Creative Hub Strabane	●	●	●	●	●
Urban Villages - Bogside/Brandywell/Fountain	●	●	●	●	●
Private Sector Student Housing Provision £48k per bed	●	●	●	●	●
NWRC Foodivation Centre and Assisted Living	●	●	●	●	●
Ebrington Primary	●	●	●	●	●
Shared Education Centre - Digital IT STEM Ebrington	●	●	●	●	●
Strabane Town Centre Regen - Smiths Mill area - Development Plan for SCORE site see also 3.3 DS	●	●	●	●	●

Investment Attractiveness

While the community plan's focus is - quite correctly - much broader than inward investment attraction, attracting investment remains a goal for Derry and Strabane. Indeed, one of the critical risks identified within the analysis is that the Community plan is too externally focused with a need to attract further investment. The community plan proposals have also been assessed against a range of investment attractiveness indicators. Investors typically assess cost and quality factors when making a location decision. The assessment primarily focusses on quality indicators, as follows:

- **Labour Market and Skills**
 - Availability of high quality graduates
 - Access to training support (apprentices)
 - Work readiness of recruits
 - Productivity
 - Labour costs
 - Availability of appropriate skills
- **Innovation**
 - Access/linkages to R&D institutions or centres of excellence
- **Infrastructure/Connectivity**
 - Roads access
 - Air access
 - Telephony, internet speed/access
- **Quality of Life**
 - Access to culture, arts leisure and sport
 - Access to quality housing
 - Access to quality schools
 - Access to quality retail offer

At a headline level, when compared against the indicators above, the proposed projects are considered to have a relatively low impact on investment attractiveness in Derry and Strabane. As mentioned previously, this is to be expected given the community plan’s aim of local, inclusive growth rather than attracting FDI investment.

Theme	Investor Location Decision Impact														
	Labour Market & Skills					Innovation		Infrastructure/Connectivity				Quality of Life			
	Availability of high quality graduates	Access to training support e.g. apprenticeships	Work readiness of new recruits (knowledge and skills)	Labour productivity	Labour costs	Availability of Skills e.g. engineering skills, management skills	Access/linkages to R&D institutions/ CoEs	Availability/Cost of Business Premises	Roads access	Air Access	Telephony, Internet and data speed/access	Access to Culture, arts, leisure & sport	Access to quality housing	Access to quality schools	Access to quality retail offer
1. URBAN/RURAL REGENERATION	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2. COMMUNITY/NEIGHBOURHOOD REGENERATION	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3. DCSDC CONSTRUCTION/REFURBISHMENT	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4. EDUCATION	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5. HOUSE BUILDING PROGRAMME up to 2025	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6. HEALTH	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
7. EBRINGTON	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
8. FORT GEORGE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
9. RIVERSIDE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10. OTHER STRATEGIC DEVELOPMENT SITES	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
11. EXISTING CAR PARKS WITH DEVELOPMENT POTENTIAL	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
12. INFRASTRUCTURE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
13. SUSTAINABILITY - ENERGY - RECYCLING	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
14. SPORTS/LEISURE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15. PARKS, PLAY AND GREENWAYS, OTHER	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Within the broad project themes, there are a range of projects that could make a significant contribution to Derry and Strabane’s investment attractiveness. In particular, the University expansion will improve the area’s attractiveness given its positive impact upon labour market and skills, through the provision of skilled graduates and the increased availability of training opportunities. The top 10 projects are presented below , many of which are related to transport and education.

Project description	Investor Location Decision Impact														
	Labour Market & Skills					Innovation		Infrastructure/Connectivity				Quality of Life			
	Availability of high quality graduates	Access to training support e.g. apprenticeships	Work readiness of new recruits (knowledge and skills)	Labour productivity	Labour costs	Availability of Skills e.g. engineering skills, management skills	Access/linkages to R&D institutions/ CoEs	Availability/Cost of Business Premises	Roads access	Air Access	Telephony, Internet and data speed/access	Access to Culture, arts, leisure & sport	Access to quality housing	Access to quality schools	Access to quality retail offer
University Expansion excl. accommodation 2636 FTE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
NWRC Creative Hub Strabane	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
NWRC Foodivation Centre and Assisted Living	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
NWRC Phase 6 Springtown Campus/Strand 750 FTE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
City of Derry Airport Development - forecast	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Sustainable Transportation systems	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A2 Buncrana Rd upgrade incl. Pennyburn Roundabout	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A5 Road phase 1 - Derry to Newbuildings	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A6 Road - Belfast	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Railway Upgrade Derry to Belfast 2015 estimate	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Intermediate scenario

Overview

One of the key risks to the project is that one or a number of the key projects does not proceed, which will impact significantly upon the outcomes of the Community Plan. In order to illustrate the potential impact of these significant projects not proceeding and the downstream impact on those projects that are dependent upon them, an “intermediate” scenario has been constructed.

Methodology

DC&SDC provided a list of key projects to be removed from the Community Plan Capital Matrix. In addition, projects that were highly dependent on these projects were scaled back by 50% and those that were moderately dependent were scaled back by 25%. These assumptions were agreed between the Council and UUEPC and whilst they are quite arbitrary, they can help to provide an overall perspective on the magnitude of the impact of removing the key projects.

The projects that were removed to construct the intermediate scenario were:

- University expansion;
- A5 Road phase 1a - Derry to Newbuildings;
- A6 Road – Belfast; and
- A2 Bunrana Rd upgrade incl. Pennyburn Roundabout.

The level of dependency between other projects and the listed critical projects was determined using the interdependency matrix. The table below details how projects were assigned their dependence category, as well as the respective category removal weightings.

Dependence category	Average score within interdependency matrix	Proportion of jobs to be removed
Highly dependent	Greater than 2	50%
Modestly dependent	Equal to 2	25%
Not dependent	Less than 2	0%

These initial job and capital effects feed through the model and produce outputs which can be compared against the CP ambition outputs.

The illustrations in the following tables and charts show that delivery of the Community Plan is heavily dependent on these four key projects, which between them account for almost £1bn of capital expenditure and 3,500 jobs in direct terms. Modelling these potential impacts suggests that GVA could be £300m lower in the intermediate scenario than the Community Plan full delivery scenario and employment could be 4,500 lower in 2030. Unemployment and Economic inactivity would remain above the NI averages.

Outputs from the intermediate scenario

Impact of removing critical projects upon Community Plan Capital Matrix provided by Derry and Strabane DC, 2015 – 2030

	CP ambition	Intermediate	Difference
Capital expenditure	£3.6bn	£2.7bn	-£0.9bn
Direct jobs resulting from capital projects	7,770	4,201	-3,569
Direct jobs resulting from programmes	£490	£490	£0

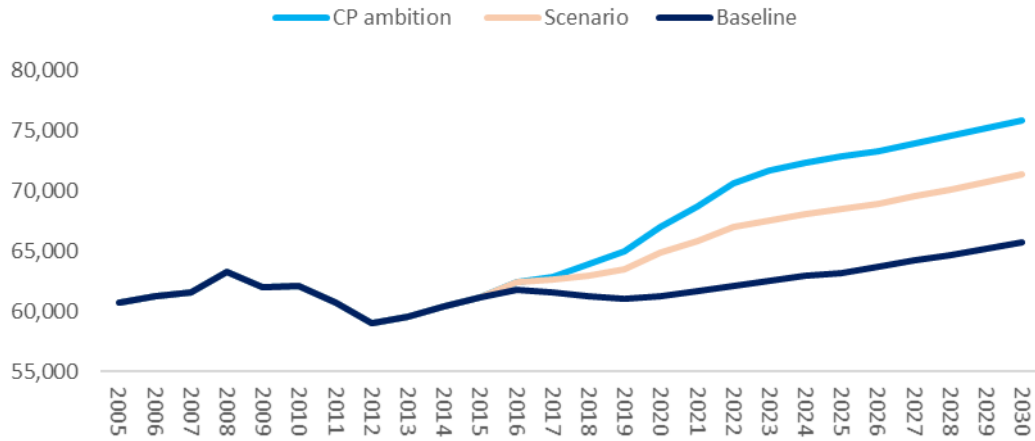
Key economic indicators in Derry and Strabane DC, baseline, Intermediate & Community Plan scenario

	2015	2020	2025	2030
Population (Intermediate scenario)	149,700	153,000	154,800	155,800
Jobs (Intermediate scenario)	61,100	64,800	68,400	71,300
GVA £m (Intermediate scenario)	£2,300	£2,700	£3,000	£3,200
Population % growth from baseline	-	0.3%	0.6%	0.7%
Jobs % growth from baseline	-	5.9%	8.4%	8.5%
GVA % growth from baseline	-	6.1%	8.9%	8.8%
Population (Community Plan Ambition)	149,700	154,100	157,300	158,500
Jobs (Community Plan Ambition)	61,100	66,900	72,800	75,800
GVA £m (Community Plan Ambition)	£2,300	£2,800	£3,200	£3,500
Population (net difference)	-	-1,100	-2,500	-2,700
Jobs (net difference)	-	-2,100	-4,400	-4,500
GVA £m (net difference)	-	-£100	-£200	-£300
Population (net difference %)		-0.7%	-1.6%	-1.7%
Jobs (net difference %)		-3.1%	-6.0%	-5.9%
GVA £m (net difference %)		-3.6%	-6.3%	-8.6%

Source: UUEPC modelled estimates of the Community Plan inputs as provided by Derry & Strabane District Council Community Planning Team

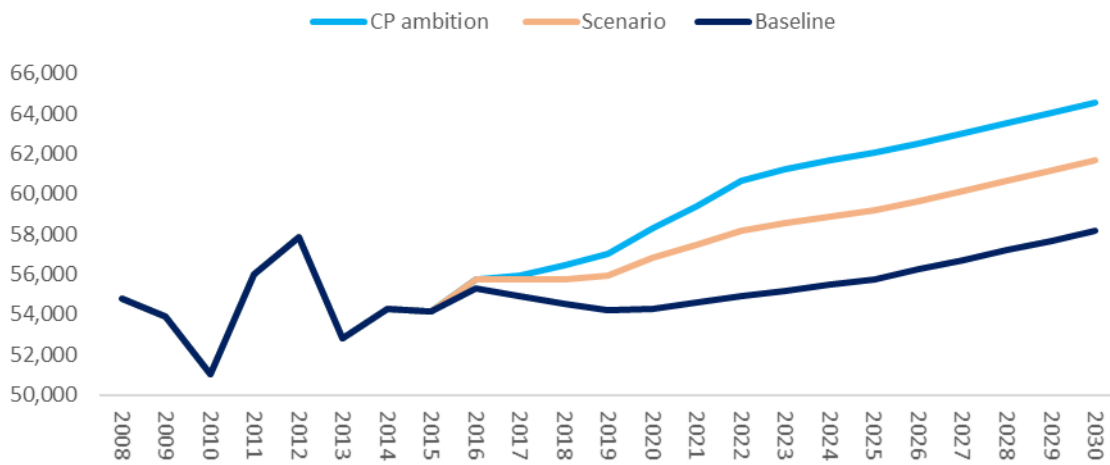
Summary of employment impacts

Workplace based employment, baseline, CP ambition, Intermediate
2005 - 2030



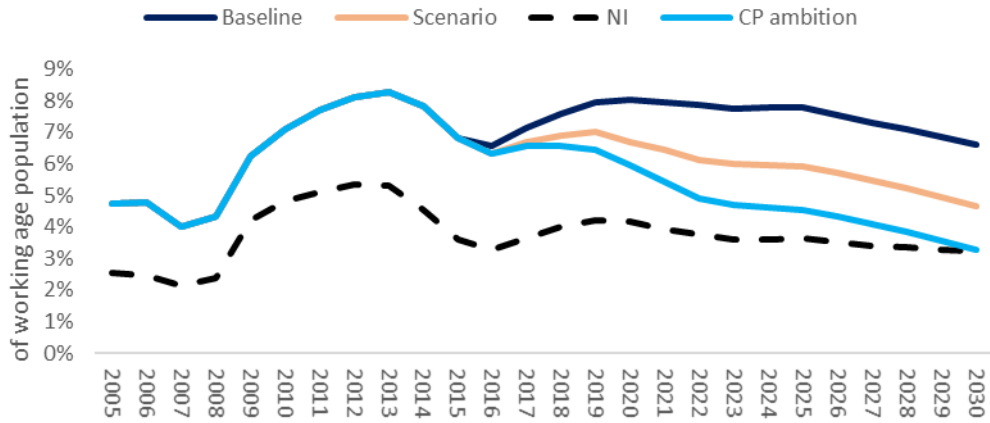
Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Resident based employment, baseline, CP ambition, Intermediate,
2008 - 2030



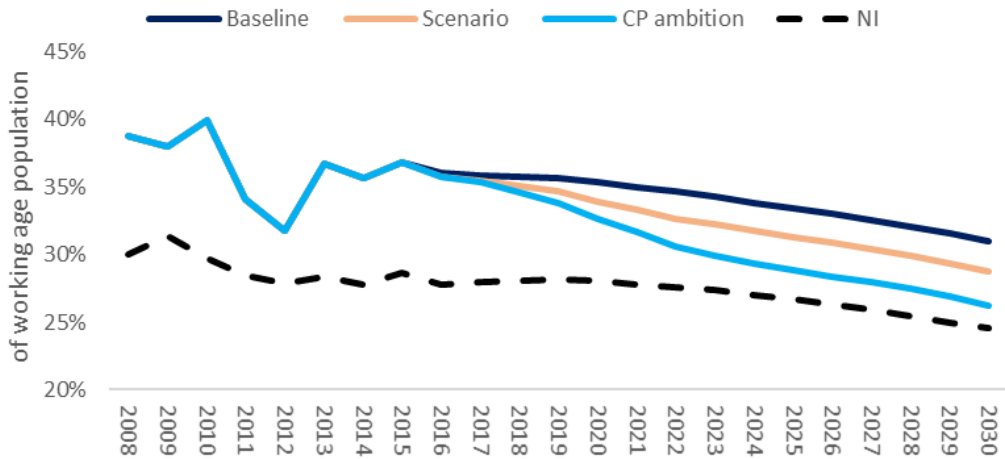
Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Unemployment, baseline, CP ambition, Intermediate
2005 - 2030



Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

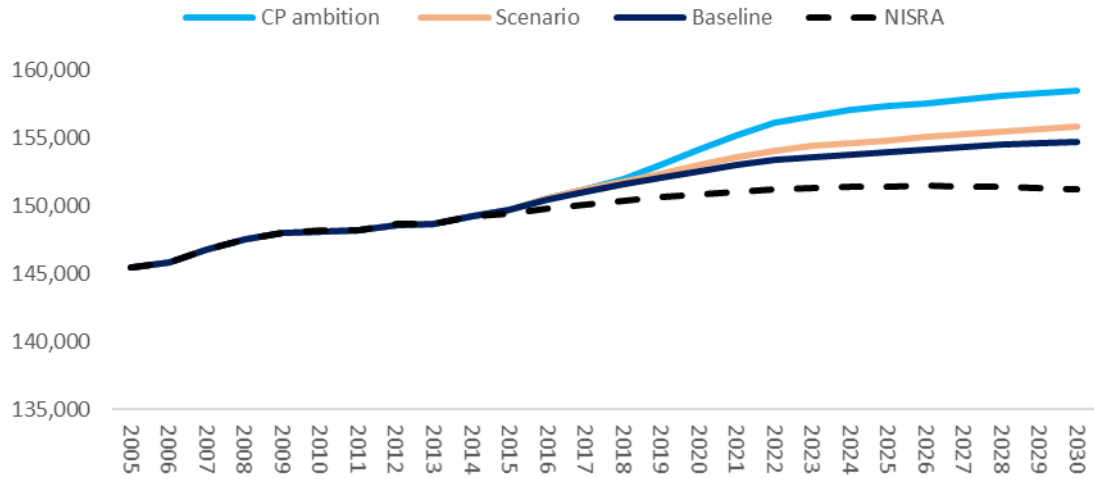
Inactivity, baseline, CP ambition, Intermediate,
2008 - 2030



Source: UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Demographics

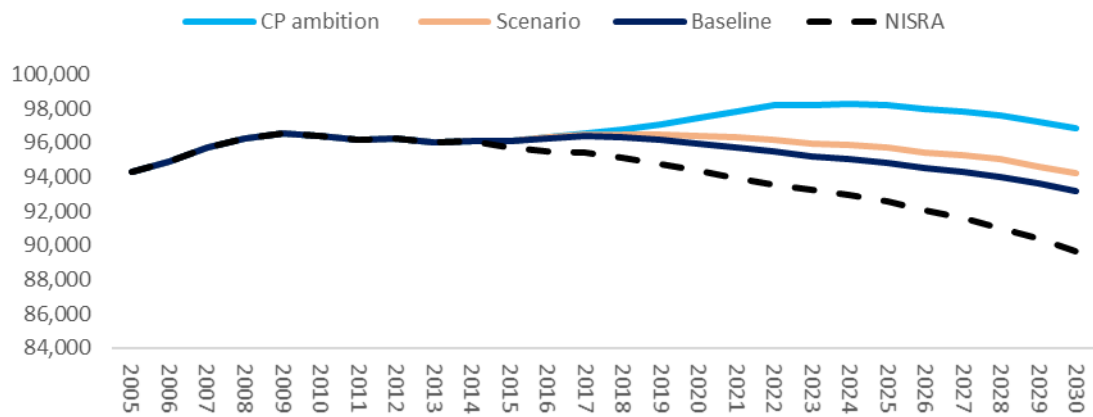
Total population, baseline, CP ambition, Intermediate,
2005 - 2030



Source: NISRA, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Note: International students resulting from the University expansion figures have been included within population calculations

Working age population (aged 16-64), baseline, CP ambition, Intermediate,
2005 - 2030



Source: NISRA, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Note: International students resulting from the University expansion figures have been included within population calculations

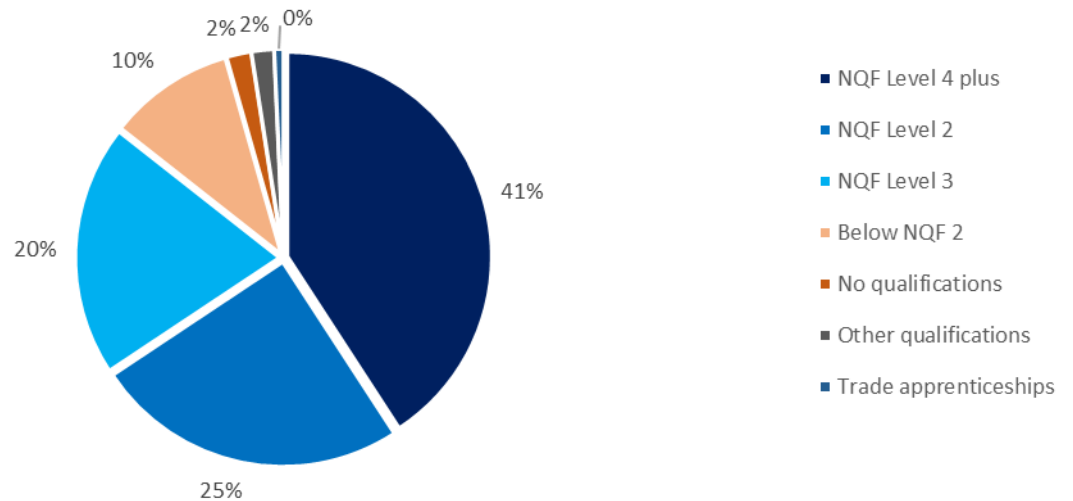
Skills

Projected skills profile of net additional jobs (2025)

Qualification level	Net additional jobs	CP ambition %	Inter dependence %	p.p. difference
No qualifications	100	2%	2%	0%
Other qualifications	100	2%	2%	0%
Below NQF 2	500	9%	10%	1%
NQF Level 2	1,300	24%	25%	1%
Trade apprenticeships	0	1%	1%	0%
NQF Level 3	1,000	19%	20%	1%
NQF Level 4-5	500	11%	10%	-1%
NQF Level 6	1,200	23%	22%	-1%
NQF Level 7	400	9%	7%	-2%
NQF Level 8	100	1%	1%	0%
Total	5,300	100%	100%	-

Sources: LFS, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Intermediate scenario, net additional jobs by skill level, 2025



Sources: LFS, UUEPC modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Assessing the magnitude of change

DC&SDC rank against Local Enterprise Partnership areas, 2025

	DC&SDC baseline	DC&SDC CP	DC&SDC Inter'	Difference Inter' vs baseline	Difference Inter' vs CP
Agriculture	1	1	1	0	0
Mining	19	19	19	0	0
Manufacturing	28	28	28	0	0
Utilities	38	38	38	0	0
Water supply & waste	29	29	29	0	0
Construction	13	13	12	0	-1
Retail	28	24	24	4	0
Transportation	37	34	34	3	0
Accommodation	32	25	27	5	-2
Information & Comm's	14	10	11	3	-1
Financial activities	24	15	19	5	-4
Real estate	40	37	40	0	-3
Professional & scientific	40	36	40	0	-4
Administration services	32	28	32	0	-4
Public Admin'	1	1	1	0	0
Education	20	7	20	0	-13
Health & social work	7	5	5	2	0
Arts and entertainment	20	9	12	8	-4
Other services	19	5	7	12	-2
Total	35	17	27	8	-10

Source: BRES, NOMIS, UUEPC analysis & modelled estimates of the Capital Projects within Community Plan inputs, as provided by Derry & Strabane District Council Community Planning Team

Summary

The modelling of the capital projects and some community programmes from DC&SDC's Community Plan illustrates the economic potential of the plan and what could be achieved if it is successful. The modelling exercise helpfully brings together a range of factors including; the situation in the local labour market, skills supply and inflows of new skills, available working age population and sets these against the aspirations in the capital projects within the community plan.

The investigation has revealed a number of risks that community planners should be cognisant of and mitigate where possible.

- **Scale of change** – whilst the transformational ambition at the centre of the Community Plan is to be lauded it is important to draw attention to the projected scale of the change. If all of the risks are met this would see the Council area grow ahead of the rates achieved in many comparable city regions. The growth rate, while achievable, would be unprecedented in the city's history.
- **Skills supply** – the profile of skills requirements within the forecast additional employment does not match well with the skills of those who are currently out of work within the Council Area. The successful delivery of the plan is dependent upon significant upskilling of the local population as well as migration and commuting into the area in order to fill additional employment opportunities within the plan.
- **Consumption expenditure** – the plan is heavily reliant on consumer expenditure and will rely to a large degree on cross border, tourism and expenditure from those living in other council areas to deliver upon plans for the retail and accommodation sectors.
- **Funding** – the capital expenditure programme is particularly ambitious, totalling £3bn of expenditure. Whilst these are multi-year plans and include private sector expenditure as well as public, for context, the total Departmental Capital DEL is set at £1.2bn for the NI Executive for 2016-17⁶. Some projects are approved and others are at concept, appraisal or approval stage. Failing to secure funding, securing lower amounts or delaying the expenditure associated with these capital projects will lead to a smaller, later, or smaller and later impact as a result of the Community Plan.
- **Sub-regional development** – to follow on from the funding risk noted above, the demand for funding within the plan presents a risk of inequitable dispersion of funds across NI. Given scarcity of funding and competing resources, achieving this level of funding would result in a lower amount available for other areas within NI.
- **Profiling and timing of projects** - plans for expenditure appear to be focussed in 2016-19 in particular. A range of factors may be at work including the desire of project promoters to bring forward many projects quickly, or uncertainty in terms of projects that might be required in 4 – 10 years-time. However, consideration of the timing of some projects may help with securing the required capital expenditure.
- **Inclusive growth** – many of the employment opportunities are at level two and above, which means that those who have no qualifications are likely to face significant challenges in securing employment unless they are upskilled. Delivery of the Community Plan will result in local economic growth, however, at ward level, the most deprived and correspondingly low skilled wards will require additional policy interventions. To mitigate against this risk and promote inclusiveness and equality of employment opportunities within the Community plan, Derry & Strabane DC aim to put in place mitigation measures through their skills pilot programmes.

⁶ NI Executive, Budget 2016-17.

- **Desirability and infrastructure** – the success of the Community Plan is highly dependent on programmes relating to desirability and infrastructure being implemented. There is a need identified for more people to move into the Council area to take up employment opportunities. The overall attractiveness of the area (in terms of housing, schools, shopping, infrastructure, public realm and civic amenities) will be important to those who may consider relocating to the area.
- **‘Brexit’ impact** – the decision for the UK to leave the European Union has led to uncertainty surrounding economic outlook for DC&SDC. There are many unknowns surrounding issues such as trade agreements, funding, and migrants all of which are critical to the success of the Community Plan.

The Community Plan, as it is currently constructed, is particularly ambitious - which should be expected from any Plan that aims to transform the economic future of a locality. The modelling exercise has helpfully identified issues where constraints could impact upon the achievement of the Plan, such as skills and funding which allows mitigating actions or strategies to be developed as extensively as possible within the Councils’ areas of responsibility and influence.

In summary, the capital projects contained within the Community Plan ambition have the potential by 2025 to create;

- 9,700 additional jobs;
- £500m of GVA;
- £200m of wages;
- Increase the average wage by £200 to £25,700; and
- Generate nearly £90m in tax revenues, £9m through rates, part of which is retained within the Council.

Technical annex

Skills profile by sector

Sector	No qualifications	Other qualifications	Below NQF 2	NQF Level 2	Trade apprenticeships	NQF Level 3	NQF Level 4-5	NQF Level 6	NQF Level 7	NQF Level 8
Agriculture	13%	3%	12%	59%	0%	6%	4%	4%	0%	0%
Mining and quarrying	3%	0%	25%	30%	21%	1%	0%	15%	5%	0%
Manufacturing	2%	3%	16%	31%	1%	20%	3%	18%	6%	1%
Utilities	5%	1%	8%	28%	7%	16%	3%	13%	19%	0%
Water supply & waste	14%	0%	26%	24%	16%	0%	0%	20%	0%	0%
Construction	2%	1%	20%	25%	10%	26%	2%	10%	3%	0%
Retail	1%	1%	10%	43%	0%	29%	5%	9%	2%	1%
Transportation	2%	1%	17%	49%	3%	16%	3%	5%	5%	0%
Accommodation	4%	5%	18%	26%	0%	25%	3%	16%	1%	1%
Information & Comm's	0%	1%	6%	11%	0%	12%	23%	40%	8%	0%
Financial activities	1%	1%	3%	36%	1%	5%	3%	33%	13%	5%
Real estate	1%	0%	1%	15%	0%	38%	0%	32%	12%	0%
Professional & scientific	1%	2%	5%	20%	0%	10%	3%	38%	18%	3%
Administration services	4%	2%	21%	19%	0%	13%	17%	15%	8%	0%
Public Admin' & defence	0%	2%	7%	15%	2%	20%	18%	26%	8%	1%
Education	0%	0%	3%	7%	0%	15%	23%	25%	22%	5%
Health & social work	0%	0%	7%	13%	0%	13%	26%	31%	9%	2%
Arts and entertainment	13%	5%	5%	17%	1%	24%	14%	13%	8%	0%
Other services	1%	2%	9%	21%	0%	40%	10%	16%	1%	0%

Modelled employment estimates by sector, 2025

Sector	Net additional	Assumed direct	Assumed indirect	Assumed induced	Indirect	Induced	Final
Agriculture	0	0	0	0	100	0	100
Mining and quarrying	0	0	0	0	0	0	0
Manufacturing	300	300	0	0	100	0	400
Utilities	0	0	0	0	0	0	0
Water supply & waste	0	0	0	0	0	0	0
Construction	100	100	0	0	0	0	200
Retail	900	500	0	400	100	400	1,000
Transportation	400	200	200	0	200	100	500
Accommodation	800	500	0	300	100	300	900
Information & Comm's	800	800	0	0	100	0	1,000
Financial activities	500	300	0	100	100	200	600
Real estate	200	100	0	0	0	0	200
Professional & scientific	1,100	1,100	0	0	200	0	1,300
Administration services	300	200	100	0	400	0	600
Public Admin' & defence	200	200	0	0	100	0	300
Education	700	700	0	0	100	0	800
Health & social work	400	400	0	0	100	0	500
Arts and entertainment	300	300	100	100	100	100	500
Other services	900	800	100	0	0	100	900
Total	7,800	6,600	500	900	1,700	1,300	9,700

The net additional employment (7,800) were provided by the Community Planning team in the project ambition list. These estimates have been adjusted down to focus only on direct employment as many of the projects within the list will include indirect or induced effects. Multiplier effects are applied only to direct employment in the project list. The outcome of this analysis suggests that a significant number of direct jobs that are dependent on consumer spending remain. These additional jobs can only be sustained if consumption demand is driven from outside the DCSDC region i.e. tourists etc.

Type 1 & type 2 multipliers (Derry & Strabane DC)

Multipliers	
Type 1	1.3
Type 2	1.5

Source: Scottish Input: Output tables & UUEPC analysis

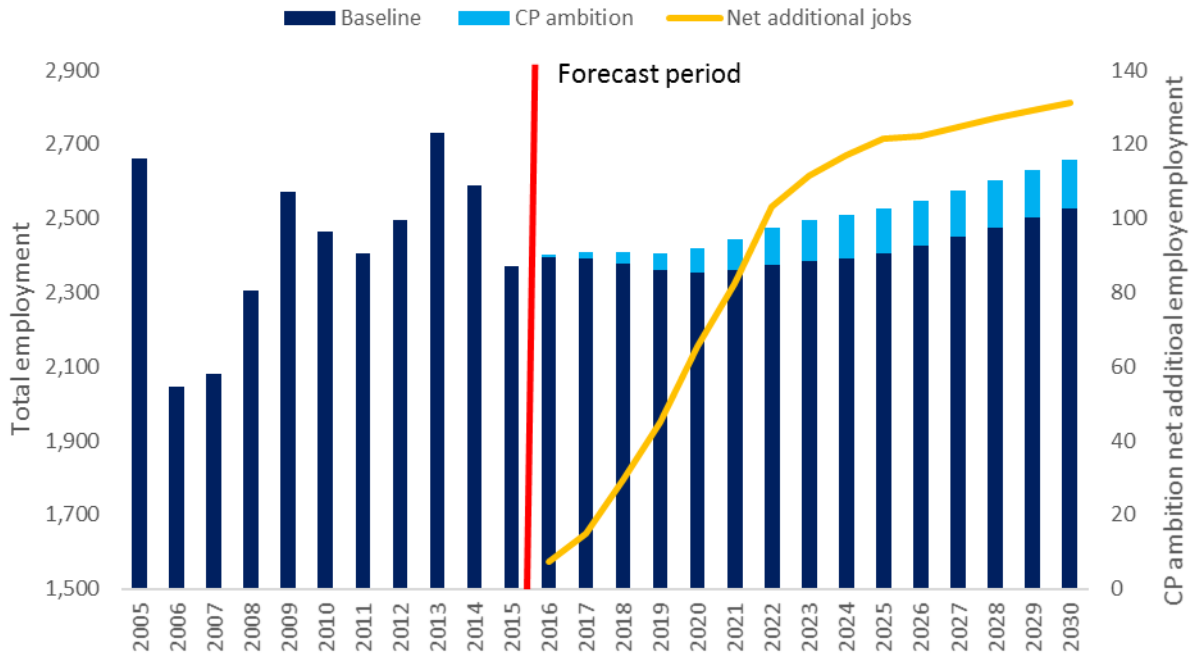
Employment data provided by DC&SDC

	Capital programmes	Non-capital projects	Total
Total programmes	178	26	204
With jobs	56	6	63
Without	122	20	141
Total jobs provided	7,772	490	8,262

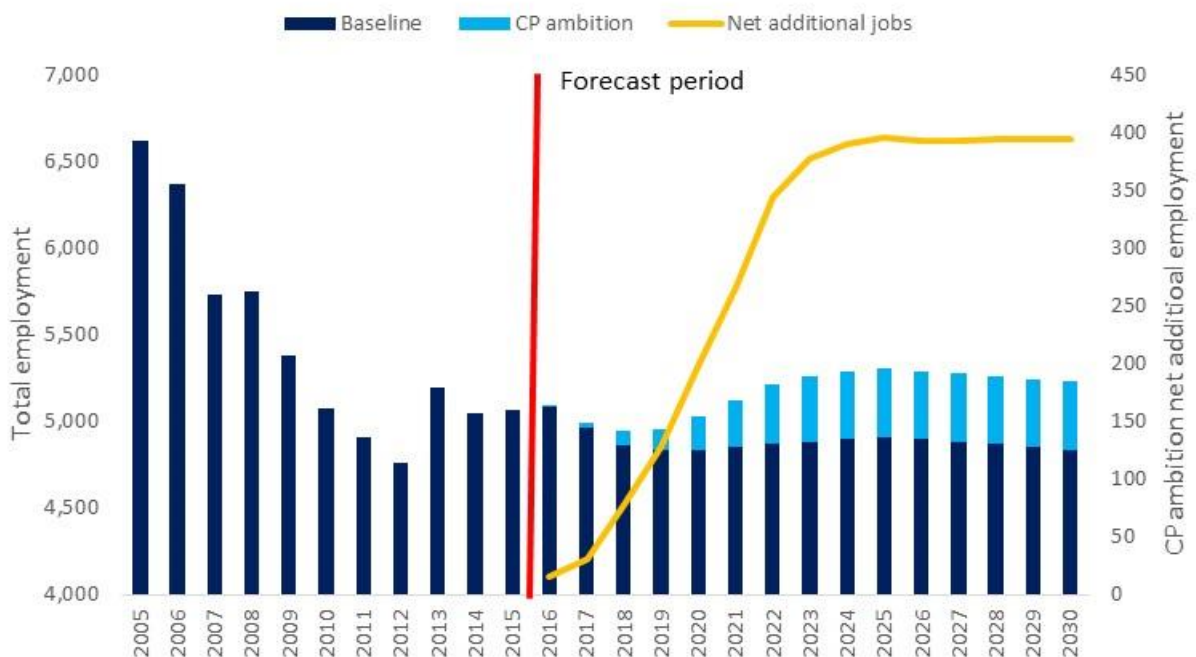
Note: Total employment number differs from "modelled employment estimates by sector, 2025" as this includes jobs provided by DC&SDC until 2030 whereas the previous is total jobs which have been implemented by 2025.

Employment by sector, baseline vs net additional⁷

Agriculture employment, total employment vs net additional, 2005 - 2030

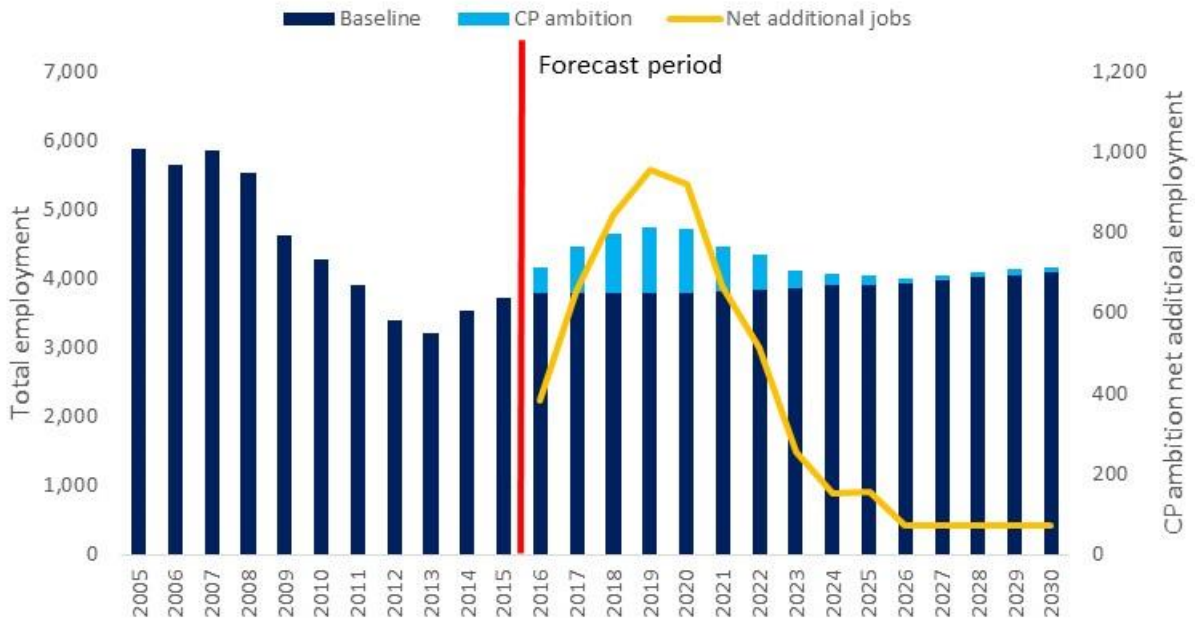


Manufacturing employment, total employees vs net additional, 2005 - 2030



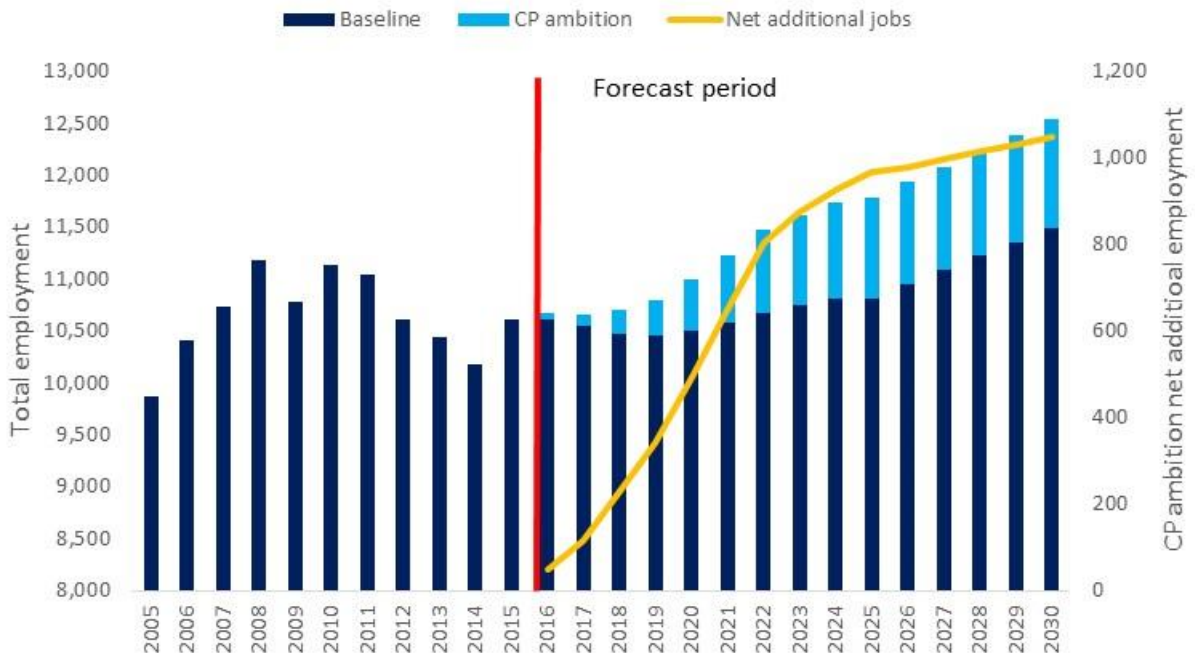
⁷ Sectors with an employment total of less than 500 are not provided

Construction employment, total employees vs net additional, 2005 - 2030

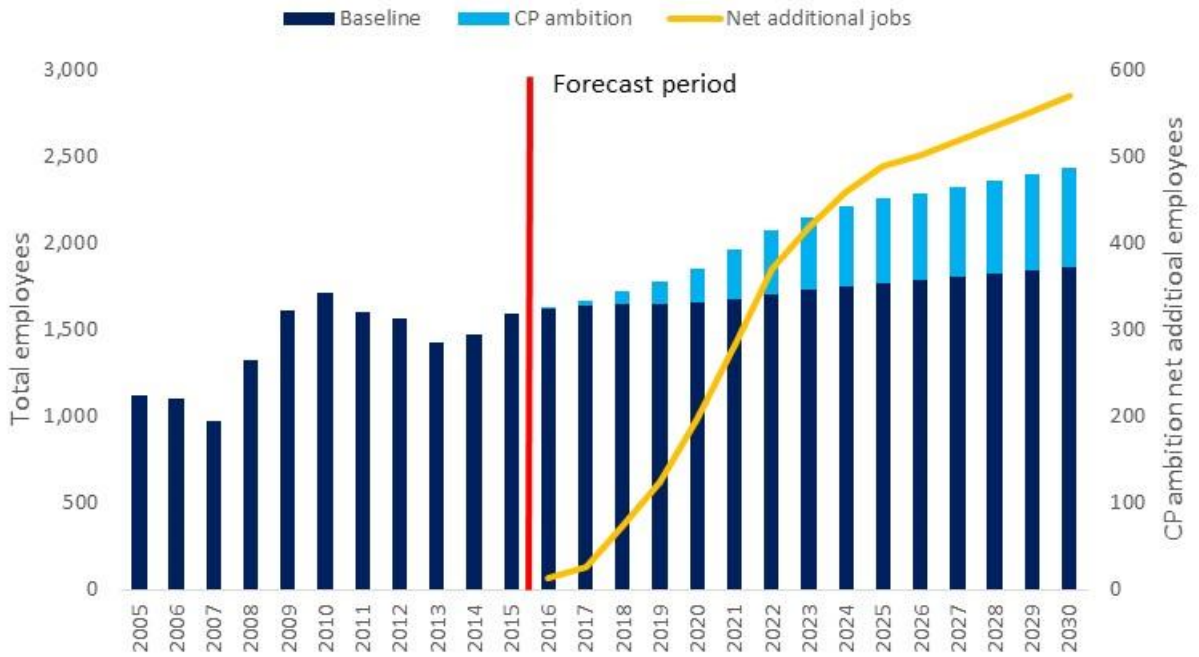


Note: Construction employment based upon profile of capital expenditure.

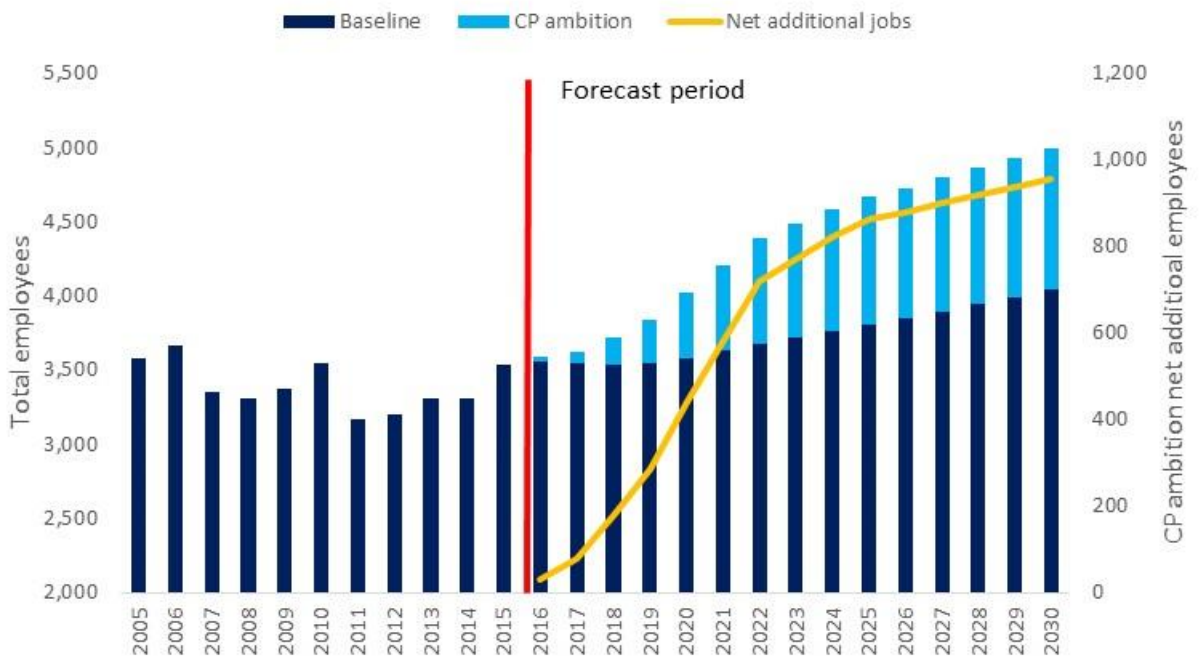
Retail employment, total employment vs net additional, 2005 - 2030



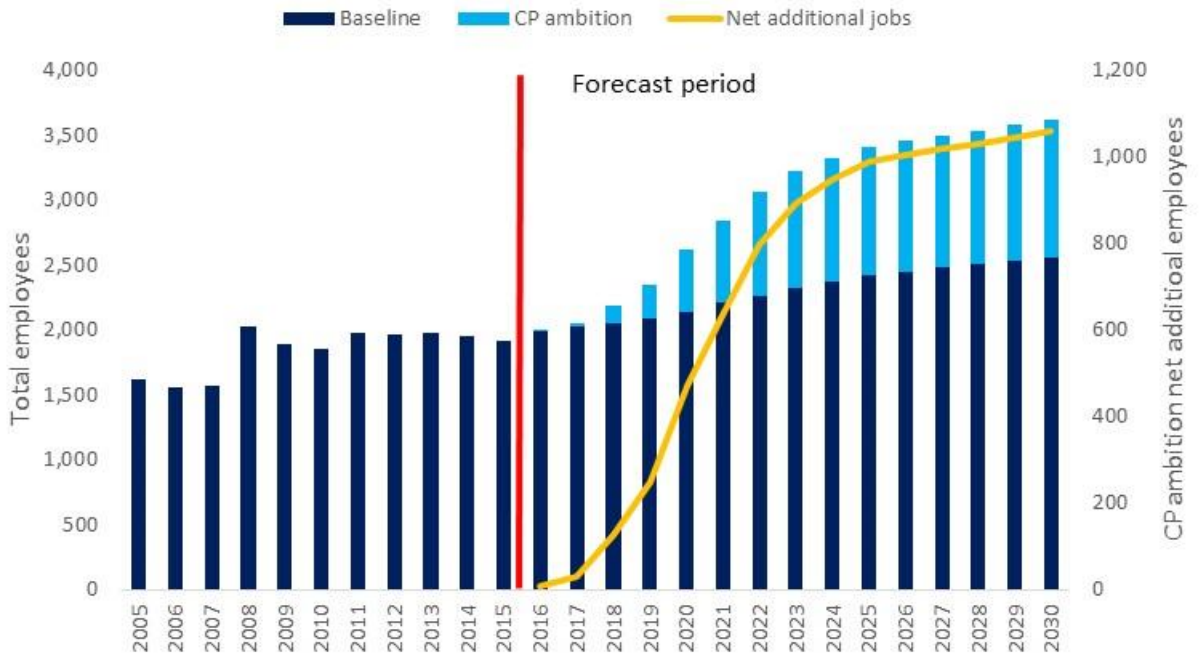
Transport employment, total employees vs net additional, 2005 - 2030



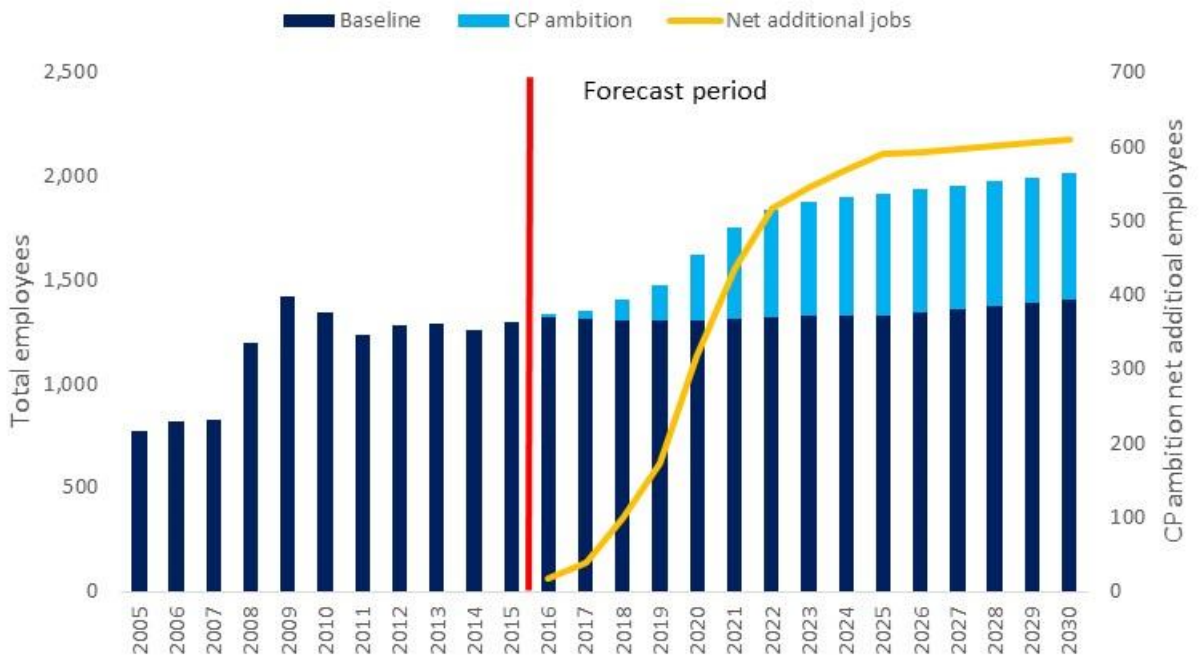
Hospitality employment, total employees vs net additional, 2005 - 2030



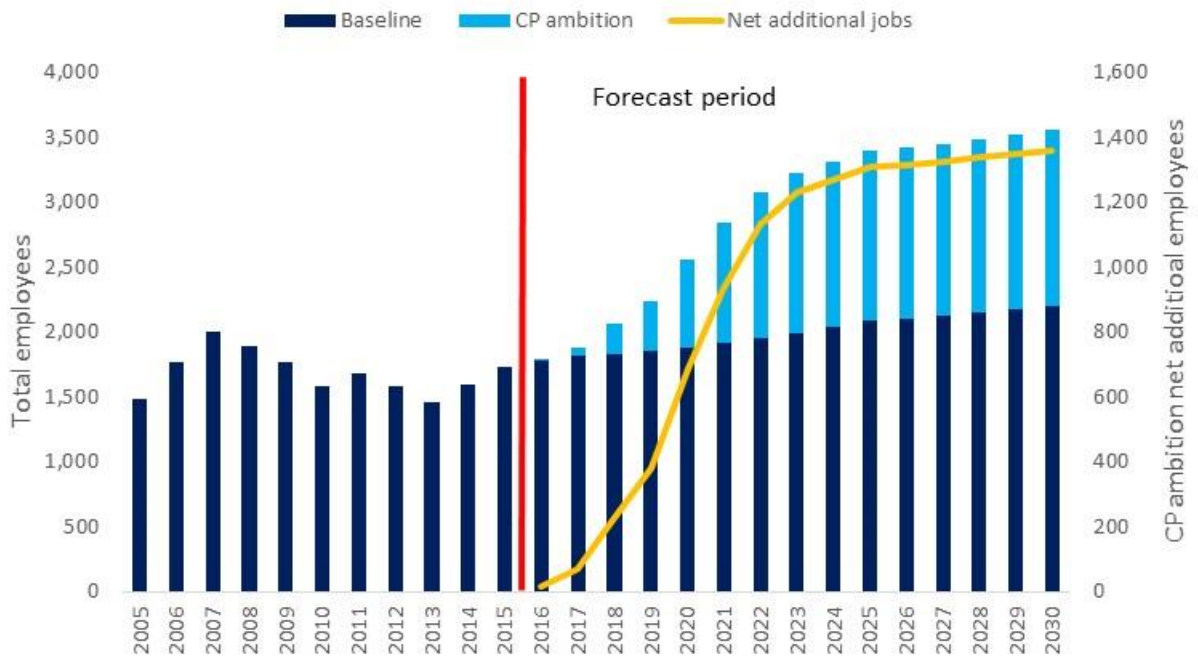
ICT employment, total employees vs net additional, 2005 - 2030



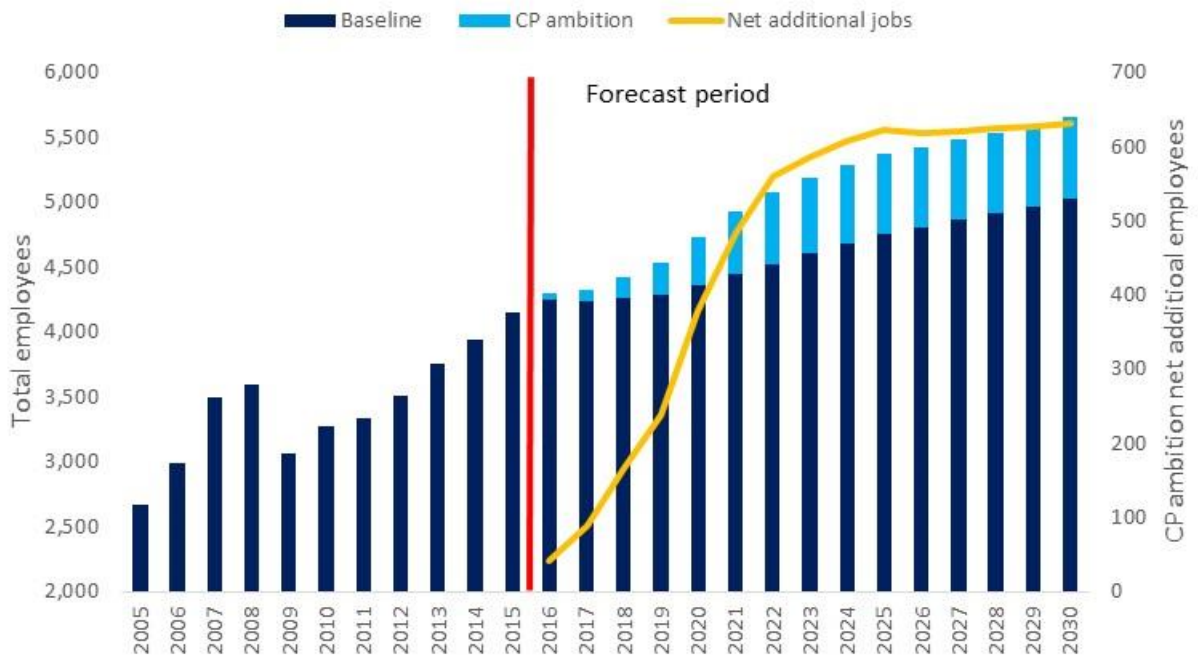
Financial services employment, total employees vs net additional, 2005 - 2030



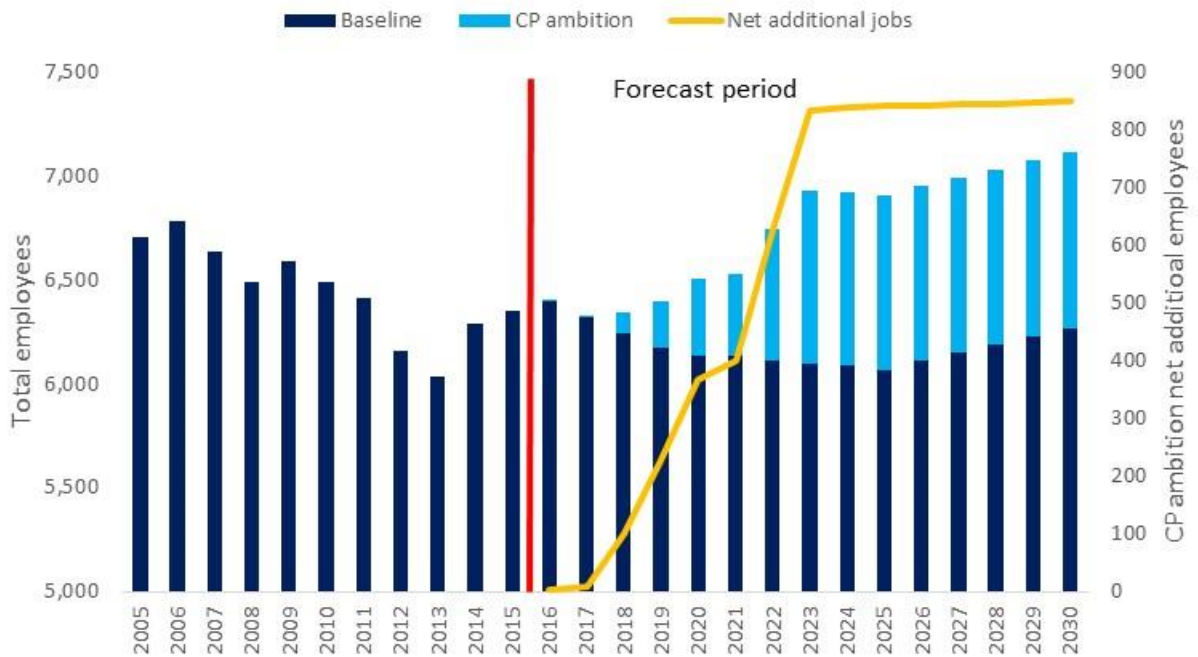
Prof^l services employment, total employees vs net additional, 2005 - 2030



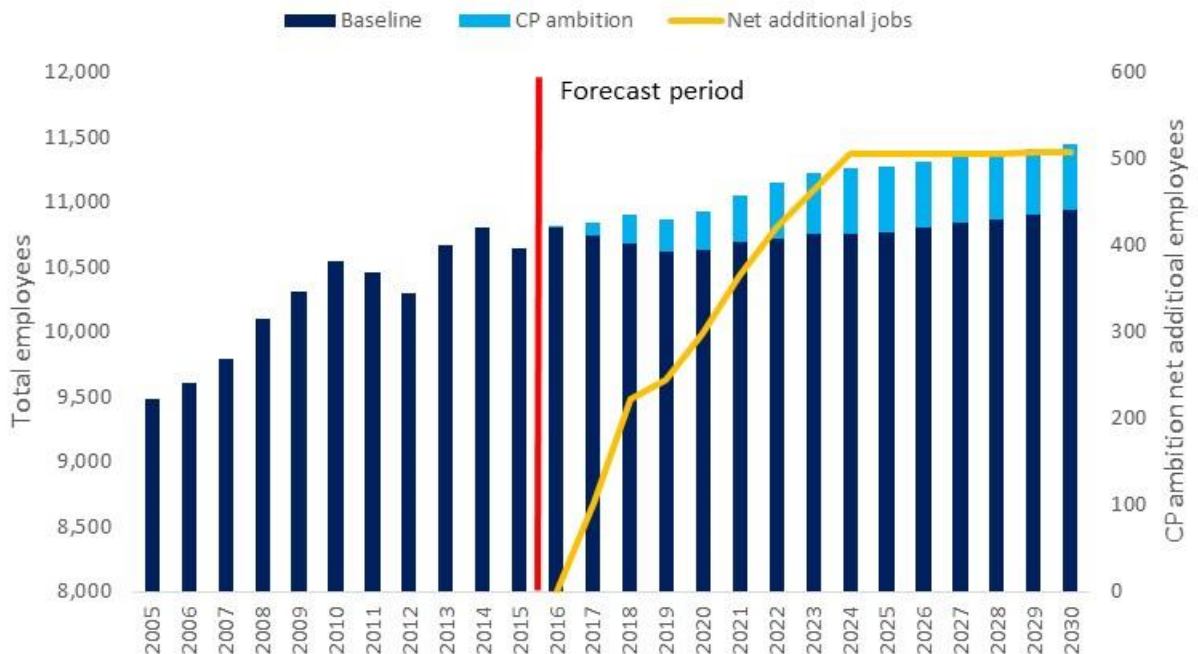
Admin^l services employment, total employees vs net additional, 2005 - 2030



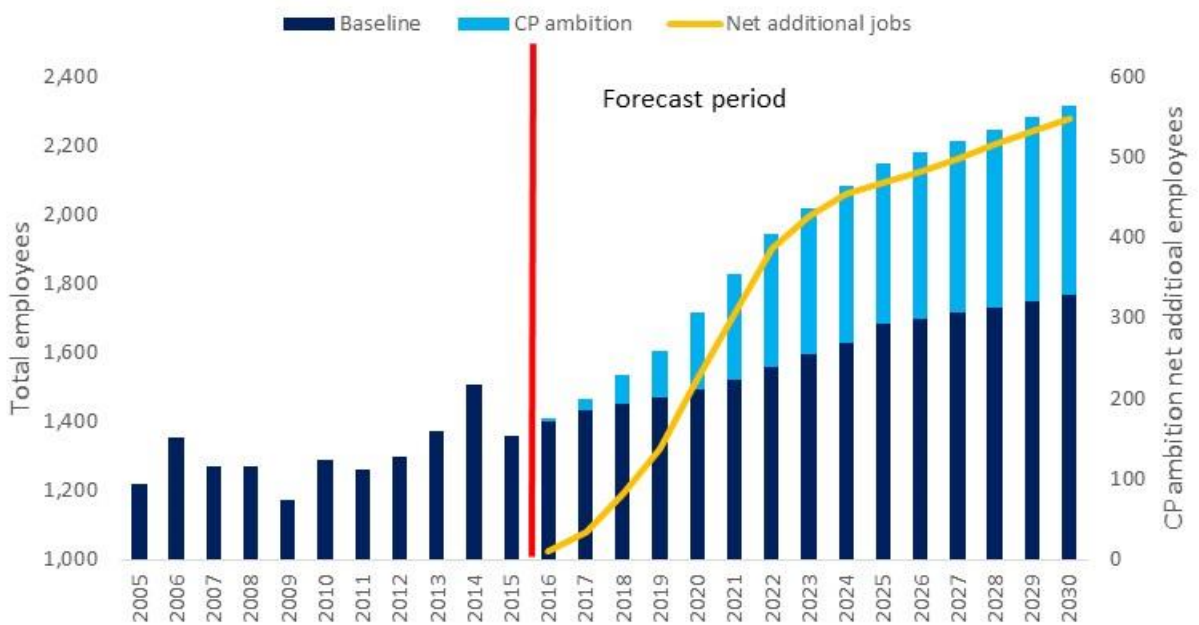
Education employment, total employees vs net additional, 2005 - 2030



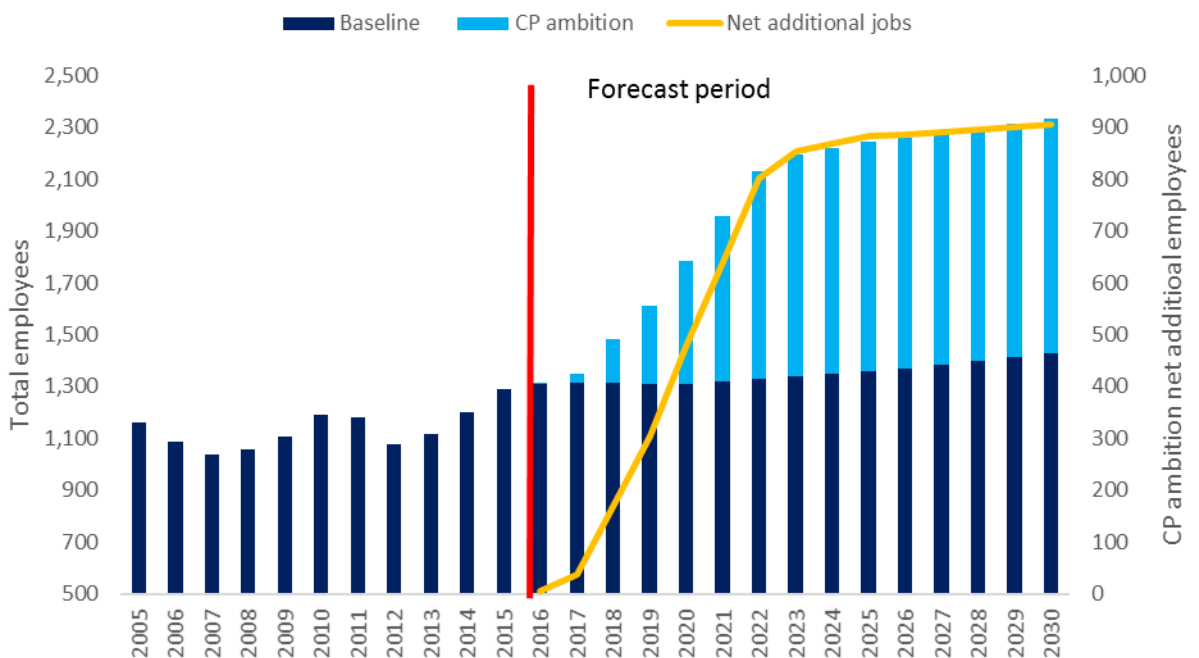
Health and social employment, total employees vs net additional, 2005 - 2030



Arts and entertainment employment, total employees vs net additional, 2005 - 2030



Other services employment, total employees vs net additional, 2005 - 2030



Total employment, total employees vs net additional, 2005 - 2030

