

Levelling Up the United Kingdom:

missions and metrics

Technical Annex

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About this document

This document provides more detail on the underpinning analytical framework for explaining UK economic geographies in the Levelling Up White Paper. It begins by discussing the capitals framework, which captures the six key drivers of spatial disparities across the UK and how best to measure them. It builds on the mission-oriented approach outlined in Chapter 2 by providing further commentary on how missions contribute to the levelling up objectives and their underpinning rationale and calibration. It also presents a preliminary set of metrics, which will be used to measure progress against the missions and evaluate the success of levelling up.

Capitals framework

The capitals framework captures the main drivers of economic and social outcomes for places. There are six capitals in this framework: physical, intangible, human, financial, social and institutional capital. These capitals act as a mutually-reinforcing system, driving economic growth and improving social outcomes, including personal well-being. However, the distribution of these capitals across the UK is unequal, leading to imbalances across people and places.

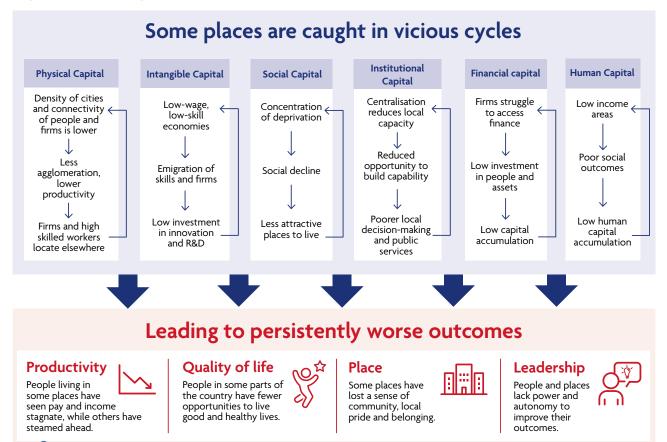
For individual places, the balance between and quantity of these six capitals affects economic opportunities and social outcomes for the people living or working there. Figure 1 outlines some of these mutually-reinforcing cycles among the capitals. For example, economic decline in the former industrial heartlands and coastal towns exacerbated poor health outcomes. which in turn led to lower levels of human capital. The lower levels of human capital then reduced the incentives for business to invest in the region and skilled workers left to seek employment elsewhere, further reducing the incentives to invest. The result was a selfperpetuating loop in which lower human capital fed into lower levels of investment, thereby reducing productivity and earnings growth, depleting social capital and pride in place, and further exacerbating the migration of skilled workers and capital out of the region.

For levelling up to be successful, each of these capitals needs to be strong in order to break these vicious cycles that stop places across the UK meeting their potential. The aim is to provide a framework within which areas can move to a virtuous cycle, ensuring long-lasting and sustainable growth in incomes, jobs and well-being.

Overall, the six capitals framework feeds into four core levelling up objectives:

- a. boost productivity, pay, jobs, and living standards by growing the private sector, especially in those places where they are lagging;
- b. spread opportunities and improve public services, especially in those places where they are weakest;
- c. restore a sense of community, local pride and belonging, especially in those places where they have been lost; and
- d. empower local leaders and communities, especially in those places lacking local agency.

Figure 1 Levelling Up Capitals Framework



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Measuring the Capitals

While the range of assets and infrastructure which are known as capitals play an important role in explaining the economic geographies of places in the UK, there are measurement challenges associated with them, both in aggregate and especially at the sub-national level. These challenges vary significantly across the capitals.

For some capitals, such as physical and intangible, there are well-established measurement methods, particularly those which are incorporated into the UK National Accounts. For others, such as social or institutional capital, there are only proxy measures currently available and limited international agreement on methods. Another key issue and difference is the granularity of data. For example, as with physical and intangible capital, financial capital has well-established measurement methods at the aggregate level, but few estimates exist at the regional level.

Figure 2 summarises the current state of play, from a measurement perspective, across the six capitals. Cells highlighted in 'green' show there are well-established methods for measurement and coverage is comprehensive at the designated geographical level - for instance, breakdowns by asset type or industry. Cells highlighted in 'orange' show that there are established methods for measurement and coverage is good, but more work is needed to improve estimates at the designated geographical level. Cells highlighted in 'red' show little to no established methods, with coverage being limited at the designated geographical level.

The Office for National Statistics's (ONS) Subnational Data Strategy, published in December, will begin to close some of these gaps and improve the quality and coherence of subnational statistics across the UK over time.¹

Figure 2 Measuring the six capitals

Capital	National aggregate	Sub-national distribution
Physical Capital		
Intangible Capital		
Human Capital		
Financial Capital		
Social Capital		
Institutional Capital		

Physical and Intangible Capital

Gross fixed capital formation (GFCF) within the UK National Accounts is the acquisition, less disposals, of produced fixed assets; that is, assets intended for use in the production of other goods and services for a period of more than a year.² Acquisition includes purchases of assets whether new or second-hand, either domestic or imported, the construction of assets by producers for their own use, and major repair or maintenance on existing assets. Non-produced assets, such as land, are not included. GFCF includes both physical and intangible capital.

Capital stock estimates are derived using international guidance from the Organisation for Economic Co-operation and Development's (OECD) Manual on Measuring Capital, which incorporate historical stocks, flows, service lives, retirement profiles and age-price profiles by asset, industry and sector.3 Foreign Direct Investment (FDI) can play an important role in increasing the physical and intangible capital stock. At the aggregate level, estimates of stocks and flows of GFCF are covered in the UK National Accounts. The distribution of this capital across the UK is available by industry, sector and asset, but not by region, and this is an important data gap.4

Physical Capital

Physical or tangible capital is the physical capital stock used to produce goods and services, including dwellings, other buildings and structures, machinery and equipment (including transport equipment, ICT hardware, and other machinery and equipment), weapons systems, and cultivated biological resources. While the housing stock is included in this definition, it does not feed directly into the wider production of goods and services but into the production of imputed rental for housing services, which is in gross domestic product (GDP).

At the **aggregate level**, estimates of the stocks and flows of physical capital are covered in the UK National Accounts. The ONS produces estimates on GFCF by sector, industry and type of asset at an aggregate level.⁶ At the **regional level**, the ONS has been producing annual regional GFCF estimates on a consistent basis from 2000 to 2019, though these are not 'official statistics' due to concerns regarding data quality. Because the ONS does not produce estimates broken down by asset type, it is difficult to distinguish regional differences in physical and intangible assets, although exploratory research by the ONS to improve this is ongoing.

- Eurostat. European System of Accounts. 2010.
- 3 OECD. Measuring Capital. OECD Manual, Second Edition. 2009.
- Zymek, R., Jones, B. <u>UK Regional Productivity Differences: An Evidence Review</u>. Industrial Strategy Council. 2020.
- 5 Eurostat. European System of Accounts. 2010.
- ONS. Business investment in the UK: July to September 2021 revised results. 2021. 6
- ONS. Regional gross fixed capital formation, ITL1 and ITL2, 2000 to 2019. 2021.

Research by Cambridge University, led by Gardiner, Fingleton and Martin (2020), recently produced updated estimates of regional capital stock, building on the approach which had been previously developed for the European Commission.8 This data is available between 1995 and 2016, by region and industry level.9

The ONS produces experimental estimates of investment in infrastructure by the UK Government and the market sector, as well as initial estimates of the stock of infrastructure capital owned by the market sector.¹⁰ However, regional breakdowns only include the infrastructure share of total new construction.

Intangible Capital

Intangible assets, also known as knowledge capital, are defined as assets without a physical or financial embodiment, such as software and databases, research and development (R&D) and mineral exploration, artistic originals, design, and training, market research and branding. 11 The move towards a services and knowledge-based economy has seen the steady rise in the importance of intangible assets across developed economies, with spending on intangibles now surpassing spending on physical assets.¹²

In the UK National Accounts, in line with international guidance, spending on some intangible assets is not treated as investment.¹³ "Capitalised" intangible assets include software and databases; entertainment, literary and artistic originals; mineral exploration and evaluation; and R&D. "Uncapitalised" intangible assets include design, financial product innovation, branding, organisational capital and firm-specific training. Estimates of capitalised intangibles within the UK National Accounts are mostly collected by survey data. Estimates of uncapitalised intangibles are either collected by survey data or are produced using imputations from the UK National Accounts.

At the **aggregate level**, estimates on the stocks of intangible capital are covered in the UK National Accounts. GFCF estimates of capitalised intangibles are available from 1997 onwards, and include an industry breakdown. Experimental estimates have also been produced by the ONS to account for a broader set of intangible assets not currently capitalised in the UK National Accounts. These estimates are available at an industry level from 1992 to 2018 but are not published regularly.¹⁴

Few estimates of capitalised and uncapitalised intangibles exist at the regional level. R&D is a key driver of both capitalised and uncapitalised intangibles. Measures such as Gross Expenditure on Research and Development (GERD), which have estimates available by sector and region from 2001 to 2019¹⁵, can therefore be used as a proxy. Output measures such as

- Gardiner, B., Fingleton, B., Martin, Ron. Regional disparities in labour productivity and the role of capital 8 stock. National Institute Economic Review. 2020.
- There are some shortcomings with the data, with the authors suggesting that the definition of capital 9 needs to be widened to include the increasingly important role played by intangibles.
- ONS. Developing new statistics of infrastructure: August 2018. 2018.
- ONS. Experimental estimates of investment in intangible assets in the UK: 2015. 11
- Haskel, J., Westlake, S. Capitalism Without Capital: The Rise of the Intangible Economy. Princeton 12 University Press. 2018.
- 13 ONS. Developing experimental estimates of investment in intangible assets in the UK: 2016. 2019.
- 14 ONS. Investment in intangible assets in the UK: 2018. 2021.
- 15 ONS. Gross domestic expenditure on research and development, by region, UK. 2021.

the number of patent applications can be used to assess how well investments are being turned into innovative products and services. Estimates are available for some industries and at a regional level, but only up to 2015.16

Human Capital

Human capital is defined as the stock of knowledge, skills, competencies and other attributes embodied in people that are acquired during their life and used in the production of goods, services and ideas.¹⁷ The stock of human capital can be measured using the income-based method, developed by Jorgenson and Fraumeni (1989), measuring the stock of human capital as an individual's lifetime income, accounting for individual characteristics such as gender, education level and age.¹⁸

These estimates capture the stock of human capital, but not the flow. There are several other shortcomings of the income-based method, including its sensitivity to assumptions around discount rates and retirement. At present, human capital is excluded from the UK National Accounts, although the ONS is assessing its inclusion. In addition, there is work going on internationally to produce a framework to measure human capital, building on existing materials (UNECE's 2016 guide and UNECE Satellite Account for Education and Training guide (SAET)).19, 20

At the **aggregate and regional level**, the ONS produces official estimates of human capital using the income-based method, discounted life-time earnings.²¹ This provides a measure of the stock of human capital, and different demographic breakdowns, between 2004 and 2018. These estimates could be improved at the regional level by leveraging the use of administrative data, which the ONS is considering.

Measures such as the Quality Adjusted Labour Input (QALI)²² capture changes in the composition or "quality" of the employed workforce. These estimates are only available for the UK at the industry and aggregate level and are produced quarterly from 1994 to 2021. The ONS intends to produce these estimates at the regional level.

Other measures can be used as proxy indicators for human capital at the regional and local level. For example, education attainment estimates such as the proportion of the population with NVQ level qualifications, can provide an indicator of education levels among the population. They are available on an annual basis, with breakdowns at local authority and regional level. Measures such as self-reported health provide an indication of health among the working-age population.²³ In addition, the ONS intends to develop an indicator-based

- OECD.Stat. Regional Innovation. Accessed: January 2022. 16
- Westphalen, S. Reporting on Human Capital; objectives and trends. OECD. 1999. 17
- Jorgenson, D., and Fraumeni, B.M. The Accumulation of Human and Nonhuman Capital, 1948-84. p. 227-286. Found in: The Measurement of Saving, Investment, and Wealth, National Bureau of Economic Research, Inc. 1989.
- UN. Guide on Measuring Human Capital. 2016. 19
- 20 UN. Satellite Account for Education and Training: Compilation Guide. 2020.
- 21 ONS. Human capital estimates in the UK: 2004 to 2018. 2019.
- ONS. Quality adjusted labour input, summary data. 2021.
- 23 Estimates of education attainment (NVQ levels) and self-reported health are available in the Annual Population Survey (APS) as well as other ONS surveys.

approach to measuring human capital, which would aim to take a lifetime acquisition approach and, where possible, have a broadened definition which includes impacts on personal and social well-being.²⁴

Financial Capital

Financial capital refers to financial assets needed by a company or household to provide goods or services. This includes peer-to-peer loans, business loans, credit card loans and a wide range of other financial mechanisms.

At the aggregate level, the ONS produces the Sector Financial Accounts within the UK National Accounts, which provide information on sector acquisitions and disposals of financial assets and liabilities.²⁵ While estimates of financial capital stocks and flows exist through the Sector Financial Accounts, there is a lack of granular estimates of both sectors and assets, as well as geographical distribution. Collecting some financial data on a regional basis can be challenging - for example, loan liabilities are often held by head offices, rather than on a local basis.

The Bank of England (BoE) collects data on UK-based issuing and paying agents, who act on behalf of companies issuing debt on the UK capital markets and the London Stock Exchange, to provide a view on the use of capital markets to raise finance by private sector entities.²⁶ However, this data does not explain where the capital would ultimately be deployed. The same goes for any finance raised by multinational corporations using overseas entities or finance arms.

At the regional level, the British Business Bank measures the number and value of equity deals by English region and devolved administration, with estimates available for 2020.²⁷ In addition, the British Business Bank also provides estimates on the proportion of debt deals and investment for UK regions and nations.²⁸

The ONS has produced estimates for measuring household financial assets and liabilities among their total wealth, and published some information at Regional (ITL1) level and even at more granular levels of geography.²⁹ The Financial Conduct Authority also collects data on owner-occupied mortgages, both stock and flow, at postcode level.³⁰ This includes completed loans for house purchases and mortgages, with data collected guarterly since April 2005.

²⁴ ONS. Indicator Based approach to measuring Human Capital. 2020.

²⁵ ONS. UK sector accounts. Accessed: Jan 2022.

²⁶ Bank of England. Further details about capital issuance data. 2021.

²⁷ British Business Bank. Small Business Finance Markets 2020/21. 2021.

British Business Bank. Small Business Finance Markets 2020/21. 2021. 28

ONS. Household total wealth in Great Britain: April 2018 to March 2020. 2022;

ONS. Financial wealth: wealth in Great Britain. 2022;

ONS. Individual wealth: wealth in Great Britain. 2022.

³⁰ FCA. Mortgage lending statistics - December 2021. 2021.

Social Capital

Social capital refers to the extent and nature of peoples' connections with others and the collective attitudes and behaviours between people that support a well-functioning, close-knit society.31 It can be classified into four categories: personal relationships, social network support, civic engagement, and trust and co-operative norms. There are no internationallyagreed quantitative definitions of social capital and nor are there directly measured estimates of the stock and flow of social capital. Instead, proxies or indicators are used, linked to the outcomes associated with higher levels of social capital.

At the **aggregate level**, the ONS produces estimates of social capital in the UK,³² based on 25 indicators of social capital covering the four categories. These estimates are published infrequently. The Bennett Institute produces estimates on dimensions of trust, including measures such as general trust and trust in individuals and institutions, with estimates available from 2002 to 2016.33 The Community Life Survey captures evidence on community engagement, volunteering and social cohesion, available from 2016 onwards.³⁴

At the regional and local level, the What Works Centre for Wellbeing presents local wellbeing indicators across local authorities in England.³⁵ Some of these indicators are not frequently updated. The Local Trust produces a Community Needs Index,³⁶ which combines a series of indicators under the domains of social infrastructure, connectedness, and active and engaged communities. These estimates are available for England at local authority level from 2019. The Centre for Thriving Places produces a scorecard which shows a local authority's score in England and Wales under the headline elements of local conditions - for instance, are local authorities creating the right well-being conditions; equality – for instance, is well-being delivered fairly across the local area; and sustainability - for instance, is well-being delivered sustainably. Data is available for 2020 and 2021. 37

Institutional Capital

It is widely recognised that institutional capital can play an important role in the development of local economies through strong leadership and local governance; fiscal, administrative, and policy autonomy; relationships between local government, businesses, communities and individuals; and local knowledge. But there is at present no consistent or reliable statistical means of capturing these concepts.

Various proxy measures do exist, capturing one or more institutional factors. For example, expenditure-based indicators can be used as a proxy for the degree of decentralisation of decision-making, such as the share of expenditure of revenues spent or collected at the subnational level. 38 Estimates for the UK are available between 1990 and 2019 at the regional and local level.

- 31 ONS. Social capital in the UK: 2020. 2020.
- 32 ONS. Social capital in the UK: 2020. 2020.
- 33 Bennett Institute. Valuing Wealth, Building Prosperity. 2020.
- 34 DCMS. Community Life Survey 2020/21. 2021.
- 35 What Works Wellbeing. <u>Understanding Local Needs for wellbeing Data</u>. 2017.
- OCSI. Left Behind areas 2020 Interim Set. 2020.
- Centre for Thriving Places. *Thriving Places Index*. Accessed: December 2021. 37
- 38 OECD. OECD Fiscal Decentralisation Database. 2019.

These financial data do not, however, capture the true degree of institutional autonomy or capacity. Surveys have been used for this purpose. For example, Keuffer and Ladner (2016) produce an overall measurement of local autonomy along seven dimensions: legal autonomy, policy scope, political discretion, financial autonomy, organisational autonomy, noninterference and access. These estimates are available for two time periods, the 1990 and 2014 calendar years.³⁹

The Regional Authority Index (RAI) developed by Shair-Rosenfield, Schakel and Niedzwiecki, 40 measures the authority in self-rule and shared rule exercised by regional governments. This measure captures ten dimensions including: institutional depth, policy scope, fiscal autonomy, borrowing autonomy, representation and lawmaking. Annual scores for regional authorities are available from 1950 to 2018.

Measures of institutional capital tend to aggregate regional and local scores, making it difficult to track local variations in institutional capital. Furthermore, most proxy measures of institutional capital are not produced in a timely and consistent manner, making it difficult to monitor changes over time.

Ladner, A., Keuffer, N., Baldersheim, H. Measuring Local Autonomy in 39 Countries (1990–2014). Regional & Federal Studies, 26:3, 321-357. 2016.

Shair-Rosenfield, S., Schakel, S., Niedzwiecki, S., Arjan, H., Marks, G., Hooghe, L., Chapman-Osterkatz S. Language difference and regional authority. Regional & Federal Studies 31 (1): 73-97. 2021.

Measuring productivity and well-being

Productivity and well-being are the two key measures of levelling up outcomes. Progress in replenishing and augmenting the six capitals should translate into improvements in one or both. Consequently, it is important that they are measured as accurately as possible, including at the subnational level.

Productivity

Productivity is defined as the ratio of a measure of output (the amount of goods and services produced in a period) to a measure of input (the amount of labour and capital used in the production of output in that period). Some measures of productivity capture a single factor, such as labour productivity, while others multiple factors, such as total factor productivity. Most of these estimates use a combination of UK National Accounts and survey data.

At the **aggregate level**, the ONS produces several measures of productivity. These include labour productivity, produced on a quarterly basis and by industry, with estimates ranging from 1960 to 2021;⁴¹ and multifactor productivity (market sector aggregate and industries), produced on a quarterly basis, with contributions broken down by labour and capital services by industry, from 1970 to 2021.⁴² At the **regional and local level**, the ONS produces subnational productivity estimates, including city region, enterprise region and other geographical breakdowns, from 1997 to 2019.43

Well-being

There are three primary ways of measuring subjective well-being: evaluation measures ask people to reflect and evaluate their life, or some aspect of it; experimental well-being or hedonic well-being is a measure of someone's feelings, states and emotions; and eudaimonia measures capture the extent to which a person believes that his or her life has a meaning and purpose.

At the aggregate level, the ONS produces estimates of personal and economic well-being.⁴⁴ In relation to economic well-being, 45 measures such as real GDP per head, household net wealth per head, perception of financial situation, the unemployment rate and other metrics are used to assess changes in material well-being. At the regional and local level, the ONS produces estimates based on an individual's feelings of satisfaction with life, whether they feel the things they do in their life are worthwhile, and their positive (happiness) and negative (anxiety) emotions. These estimates are available from 2012 to 2021.⁴⁶

- 41 ONS. Labour productivity. 2021.
- 42 ONS. Multi-factor productivity estimates, UK: July to September 2019. 2020.
- 43 ONS. Subregional productivity in the UK: July 2021.
- 44 Stiglitz, J., Fitoussi, J., Durand, M. For Good Measure: Advancing Research on Well-being Metrics Beyond GDP. OECD Publishing. Paris. 2018.
- 45 ONS. Economic well-being, UK: April to June 2018. 2018.
- 46 ONS. Personal well-being in the UK: April 2020 to March 2021. 2021.

Missions

The Levelling Up White Paper sets out twelve missions that support key levelling up objectives and the capitals framework. These outline the medium-term ambition for the UK Government and act as an anchor for the expectations and plans of the private sector and civil society.

Two of the missions are overarching, *outcomes-based*, measures of success for levelling up: boosting living standards (pay, productivity, employment) across all parts of the UK and improving measures of well-being. The remaining missions are intermediate outcome and input-based measures, relating to the six capitals which are central to determining local growth outcomes.

The missions are calibrated using headline metrics, through which progress will be monitored. These headline metrics are set out in the measurement subsection of each mission and have been chosen based on relevance, frequency and geography of data collection. Each mission also has a set of supporting metrics. These metrics help measure intermediate outcomes, provide additional context and act as an early indicator of progress towards meeting the mission. The full suite of supporting metrics will be developed after publication of the White Paper based on further engagement with a wide range of stakeholders.

This section sets out more detail on each mission. Taking each mission in turn, the section explains why the mission is needed to address spatial disparities, the choice of headline metrics to measure and track progress, and how the mission satisfies the principles of being ambitious and specific, yet achievable.

As levelling up outcomes for citizens needs close collaboration between all levels of government, a period of engagement on the missions will be undertaken with devolved administrations. This will take account of the existing policy landscape and determine how the mission can be best calibrated and delivered. As part of this engagement, the best way forward on sharing learning and comparing progress will be agreed with devolved administrations.

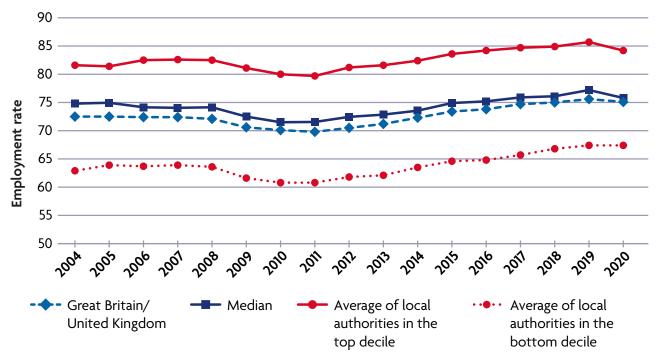
Mission 1: By 2030, pay, employment and productivity will have risen in every area of the UK, with each containing a globally competitive city, with the gap between the top performing and other areas closing.

Key related capital(s): All

Principal objective(s): boosting productivity, pay, jobs, and living standards by growing the private sector, especially in those places where they are lagging

How does this mission relate to spatial disparities? In all areas of the UK, improving economic outcomes is fundamental to improving living standards. Improvements in productivity should help lift wages and provide high quality jobs across all parts of the country. Similarly, driving higher rates of employment should contribute to increasing household incomes and living standards.⁴⁷ This mission is directed at closing the significant and persistent spatial disparities in productivity, wages and employment across all regions and nations of the UK (Figure 3).

Figure 3 Employment rate 16 – 64, GB / UK local authorities, 2004 to 2020⁴⁸



The UK Government has long championed the principle of work as the best route out of poverty and towards financial independence. This approach is based on clear evidence about the importance of employment, particularly where it is full-time, in substantially reducing the risks of poverty and in improving long-term outcomes for families and children. See, for instance, DWP. Households Below Average Income Statistics, financial years ending 1995 to 2020. March 2021.

ONS. Employment rate 16-64 by local authority, GB and UK. Annual Population Survey. NOMIS. 2021. 48

The UK, along with many other major economies, has been experiencing a "productivity puzzle", where growth in productivity since the 2007-08 financial crisis has slowed considerably compared to its historical long-term average. As Chapter 1 sets out, understanding of the issue has improved over time but there are still areas where further research is being undertaken to understand the UK context and what can drive aggregate productivity improvements.⁴⁹ Despite the stagnation issue being largely global, the UK is also generally considered to have a long-standing productivity gap with other major economies. According to ONS methodology, the G7 countries' average (excluding the UK) output per worker was 13% above the UK in 2019.50 Trends in pay and productivity across the UK can be found in Chapter 1.

As chapter 1 sets out, there is potential to improve living standards in all areas of the UK, in cities, towns, rural and coastal areas. Currently, coastal communities previously associated with tourism, parts of the North and Midlands where previously there were concentrations of manufacturing industry, and parts of Scotland, Wales and Northern Ireland underperform across key living standards metrics. As Chapter 1 sets out, there is considerable potential in these areas too, and policy interventions should seek to unlock it.

City regions are particularly important to driving economic growth and long-term prosperity. The eight largest city regions outside of London represent 22% of the UK economy, as measured by GDP, and play a critical role in their regional economies. For instance, Greater Manchester and the Liverpool City regions represent 42% and 20% of North West England's economy, respectively. However, a number of the UK's city regions currently underperform. For instance, the eleven core cities in the UK, outside of London, are on average 14% less productive than the UK average.⁵¹ The UK Government recognises the need to put the development of dynamic city regions at the centre of any plan to raise living standards. Improving the performance of cities can benefit the surrounding towns and communities as well, through raising growth and productivity. 52, 53

How will this mission be measured? The traditional metric for measuring living standards is GDP per capita, but when looking at sub-national data, this metric can obscure factors, such as commuting flows, that distort the picture. To take a more rounded view of living standards, this mission will look at GVA per hour, median pay and employment rates. These three metrics are all strongly linked to GDP, but provide a richer suite of measures relevant to tracking living standards, which may perform differently in different places. These metrics will be measured over ITL1 areas. Some supporting metrics, including the economic activity rate,

For example, through the *Productivity Institute*, which is a UK-wide research organisation established in September 2020 that is funded by a £26 million grant from the Economic Social Research Council (ESRC) in the UK – the largest single grant in its history – and supported by £6 million from its ten partner

ONS. International comparisons of UK productivity (ICP), final estimates: 2020. 2022.

OECD. Connecting Local and Regional Growth. Policy Highlights. Enhancing Productivity in UK Core Cities. 2020. Core Cities is an association of 11 large UK cities: Belfast, Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield.

Cuberes D., Desmet K., Rappaport J. Urban Growth Shadows. NBER working paper. 2021; Partridge M.D., Rickman D.S., Ali K., Olfert M.R. Lost in space: population growth in the American hinterlands and small cities. Journal of Economic Geography. 8. pp 727-757. 2008.

Rice, P., Venables A.J., Patacchini E. Spatial Determinants of Productivity: Analysis for the Regions of Great Britain. Regional Science and Urban Economics, 36, 727–752. 2006.

will be measured at the local authority level, which will ensure that the disparities that exist within city regions are also taken into account. Measuring globally competitive cities requires capturing a range of underpinning metrics, including GVA per filled job, services trade balance, the share of Knowledge Intensive Service sectors, the percentage of 16 - 64 year olds with an NVQ4+ qualification and city density, across city regions. Further work will be undertaken, in consultation with external stakeholders, to develop and refine these metrics.

Is this mission ambitious, specific and achievable? The UK has seen persistent disparities in employment rates between different parts of the country. While employment rates have improved across the UK since the Global Financial Crisis (GFC), significant gaps in employment rates between different places persist.⁵⁴ The gaps in pay and productivity between London and other regions have been stable after a long period of divergence. Although challenging, convergence does have some historical precedent. Steady convergence occurred in the UK in the first half of the 20th century, as well as in other countries in recent years.⁵⁵ Convergence will require addressing the current underperformance of UK cities, where three quarters of cities are less productive than the UK as a whole and only London is more productive than the average European city.⁵⁶

Improvements across all six capitals will be fundamental to achieving increases in productivity, pay, jobs and employment. Differences in human capital have been shown to help explain variations in regional productivity, employment rates and wages,⁵⁷ so driving improvements in skills and health will be important to levelling up living standards. Likewise, innovation and physical infrastructure are vital to improving productivity, so boosting R&D and transport networks will also be core drivers of this mission. This is especially true in cities where agglomeration effects are cumulative, as they attract people, business, finance and culture, creating a virtuous cycle.

The UK Government can play a key role in tackling the determinants of these disparities. Its position allows it to stimulate improvements across all six capitals that drive productivity, pay, jobs, and employment, while also creating the conditions for firms to grow and generate these benefits. However, central government alone does not control all the levers of growth. Efforts will have to be matched with investment by the private sector. Private sector investment and activity, both UK-owned and foreign-owned, not only drive productivity growth but also provide the incentives for people to train and invest. Foreign investment, in particular, is a key driver of growth, productivity and innovation at the sub-national level.⁵⁸ Foreign-owned businesses tend to make a disproportionately positive contribution to business turnover and employment, and drive improvements in productivity more widely through positive spillovers in skills and technology transfer to less productive firms.⁵⁹

- Powell, A. Labour market statistics: UK regions and countries. House of Commons Library. 2021; ONS. ASHE. Accessed: January 2022;
 - ONS. LFS. Accessed: January 2022.
- Industrial Strategy Council. UK Regional Productivity Differences: An Evidence Review.
- 56 Swinney, P. So you want to level up?. Centre for Cities. 2021; Centre for Cities. Cities Outlook 2020. 2020.
- 57 D'Costa, S., Overman, H. The urban wage growth premium: sorting or learning? 2014.
- 58 DIT. Estimating FDI and its impact in the United Kingdom. 2021.
- 59 DIT. Estimating FDI and its impact in the United Kingdom. 2021. ONS. UK foreign direct investment: trends and analysis. 2020.

Mission 2: By 2030, domestic public investment in R&D outside the Greater South East will increase by at least 40%, and over the Spending Review period by at least one third. This additional government funding will seek to leverage at least twice as much private sector investment over the long term to stimulate innovation and productivity growth.

Key related capital(s): Intangible capital

Principal objective(s): boosting productivity, pay, jobs, and living standards by growing the private sector, especially in those places where they are lagging

How does this mission relate to spatial disparities? Achieving this mission is a key component of strengthening the UK's position as a global hub of innovation by 2035 and becoming a science superpower, while increasing the local benefits of R&D. It aims to increase research and innovation capacity around the UK, reducing spatial disparities in R&D investment and activity, improving intangible capital and living standards across the UK.

Innovative R&D investment generates benefits for the population at large by creating highskilled jobs, and raising productivity and growth. 60 Similarly, research organisations deliver innovation spillover benefits to external firms and organisations. 61 These spillovers have been shown to benefit firms in surrounding areas, with the benefits increasing the closer a firm is located to where the research takes place. 62 This same evidence indicates that public R&D funding increases employment and turnover growth for UK firms, especially for smaller and less productive firms in high-tech sectors. Further, a study by the National Institute of Economic and Social Research suggests that productivity returns on R&D investments can be particularly large for firms in regions that have not been traditionally considered as hightech or knowledge-intensive.⁶³

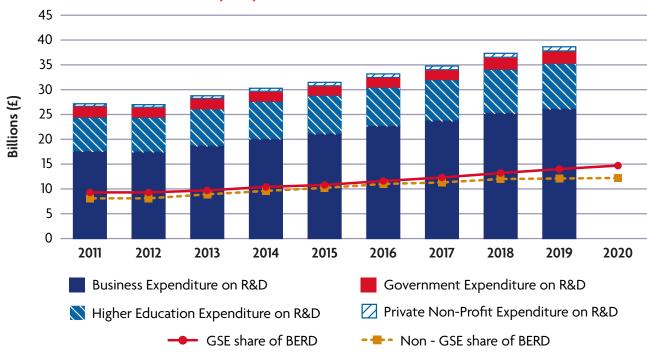
Given innovation and productivity growth tends to be more concentrated in the Greater South East (GSE). 64, 65 focusing R&D spend outside this area could provide larger boosts to areas outside the GSE's GVA as well as national GDP.66 Over half of R&D expenditure is in the GSE, which contains global R&D centres of excellence such as Cambridge, London and Oxford.⁶⁷ The GSE has increased its share of gross R&D by approximately one percentage point a year since 2017 and now stands at 2% of regional GDP (so-called R&D intensity).⁶⁸ This stands in

- 60 NIESR. From Ideas to Growth: Understanding the drivers of innovation and productivity across firms, regions and industries in the UK. 2021.
- 61 Frontier Economics. Rates of return to investment in science and innovation. 2014.
- NIESR. From Ideas to Growth: Understanding the drivers of innovation and productivity across firms, regions and industries in the UK. 2021.
- NIESR. From Ideas to Growth: Understanding the drivers of innovation and productivity across firms, regions and industries in the UK. 2021.
- 64 The Greater South East consists of London, the South East and East of England ITL1 regions.
- 65 NIESR. From Ideas to Growth: Understanding the drivers of innovation and productivity across firms, regions and industries in the UK. 2021.
- BEIS & Cambridge Econometrics. Macroeconomic modelling of the 2.4% target. 2020.; The reason for the 66 differences between regions can be traced to the sectoral composition in each case; regions with a higher manufacturing share are typically those that show more positive results.
- ONS. Gross Expenditure on research and development, by region. 2021. 67
- ONS. Gross Expenditure on research and development, by region. 2021. 68

contrast to R&D intensity outside the GSE, which has only increased from 1.4% in 2011 to 1.5% in 2019.⁶⁹

Domestic R&D expenditure comprises public and private R&D. Business R&D expenditure (BERD) accounts for the majority of private R&D and was £25.9bn in 2019, or 67% of the UK total R&D spend. To However, the picture is nuanced at a subnational level. Since 2018, BERD in the GSE has risen, while plateauing across the rest of the UK in aggregate (Figure 4). Evidence also shows a clear role for government support: in the UK as a whole, £1 of public R&D stimulates between £1.96 and £2.34 of private R&D. However, BERD by region has diverged more than government and university R&D over time.

Figure 4 Gross expenditure on research and development, UK, 2011 to 2019; business expenditure on research and development within and outside the Greater South East, UK, 2011 to 2020⁷³



How will this mission be measured? The headline metrics for this mission are government R&D funding and BERD assessed on an annual basis.^{74, 75} Data collected at ITL1 will be aggregated to monitor progress outside the GSE.⁷⁶ There are some existing subnational data on domestic public R&D spend - for example, R&D funding through UK Research & Innovation (UKRI) is currently at around 51% outside London, the South East and East of

⁶⁹ ONS. Gross Expenditure on research and development, by region. 2021.

⁷⁰ ONS. Gross domestic expenditure on research and development, UK: 2019. 2021.

⁷¹ ONS. <u>Business Expenditure on research and development, by region</u>. 2021.

⁷² BEIS. Research and development: relationship between public and private funding. 2020.

⁷³ ONS. Gross Expenditure on research and development, by region. 2021.

⁷⁴ ONS. Research and development expenditure by the UK government. 2021.

⁷⁵ ONS. <u>Business Expenditure on research and development, by region</u>. 2021.

⁷⁶ Specifically, combined ITL1 data for the 6 regions and 3 nations in the UK outside the GSE.

England.⁷⁷ However, the measure of UK government funding will also rely on new data being collected to fill gaps, with all government departments being asked to collect data on their own regional R&D expenditure and work with the ONS to publish it, to improve transparency and enhance the monitoring of this mission. Regional government R&D funding will exclude government R&D expenditure towards Horizon Europe, as domestic R&D funding can be more directly aligned to UK Government strategic goals.

Regional estimates for the leverage of private R&D from public R&D expenditure are not currently available due to data constraints, but supporting measurements for this mission will be to track annual business R&D expenditure, gross expenditure on research and development, and to collect project level co-investment data, as part of our effective programme monitoring. Additionally, to make regional R&D data more accessible and useful, the government has launched an open data tool, giving access to system indicators broken down by place and time. This data tool will be used to monitor the wider factors that influence R&D expenditure, such as R&D salaries, STEM graduates, and venture capital rates.⁷⁸

Is this mission ambitious, specific and achievable? Achieving the mission will require sustained and targeted increases in public R&D investment, as well as increased investment by business. It will be driven by a change in the way the UK Government invests. For example, for the first time, BEIS will commit to invest at least 55% of its funding outside the GSE by 2024-25. In addition, the Department for Health and Social Care (DHSC) will increase National Institute for Health Research investment outside London, Oxford and Cambridge, while the Ministry of Defence will enhance and accelerate R&D spend across the UK through the Defence and Security Industrial Strategy.⁷⁹

This mission also places a focus on using public R&D to leverage private sector R&D outside the GSE. A key aim of the UK Government's Innovation Strategy is to increase BERD across the UK – both within and outside the GSE. This will be achieved through policies such as increasing investment of public R&D expenditure in clusters of innovation in areas outside the GSE, alleviating risk and catalysing private investment, leveraging business R&D.

This mission also rests on creating sufficient R&D capacity and capabilities in the regions. Evidence suggests that successful R&D initiatives need sophisticated private sector partners,80 and that building firm capabilities is needed before R&D can be produced by firms.81 Further, FDI in R&D intensive activities is a key driver of R&D intensity at the subnational level. In 2020, foreign-owned businesses were responsible for 50% of business R&D performance in the UK.82 Consequently, supporting and expanding FDI, including through the Global Britain Investment Fund is a core element of achieving this mission.

⁷⁷ ONS. Research and development expenditure by the UK government. 2021.

BEIS/Nesta Research & Development spatial data tool. 2021. 78

MoD. Defence and Security Industrial Strategy: A strategic approach to the UK's defence and security sectors. 2021.

Cirera, X., Maloney, W. The Innovation Paradox: Developing-Country Capabilities and the Unrealized 80 Promise of Technological Catch-Up. 2017.

Coad, A. What's good for the goose ain't good for the gander: heterogeneous innovation capabilities and the performance effects of R&D. 2020.

⁸² ONS. Business enterprise research and development. 2021.

Mission 3: By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.

Key related capital(s): Physical capital

Principal objective(s): boosting productivity, pay, jobs, and living standards by growing the private sector, especially in those places where they are lagging

How does this mission relate to spatial disparities? This mission aims to begin redressing geographic imbalances in the UK's transport infrastructure, an important element of physical capital, to boost the productivity of places outside London and unlock access to jobs. Achieving this mission would also contribute towards the UK reaching its Net Zero target by delivering more effective public transport. Transport modes such as buses, cycling and walking play a crucial role in enabling access to work for the isolated and vulnerable, while reducing congestion for other road users.83

Use and quality of public transport is higher in London. London consistently enjoys the shortest travel times to access key services and local employment centres across all modes of transport (public transport, walking, cycling and car), although this is also a function of it having a higher population density than other UK cities.84 Unlike London, approximately 25% of places do not have multi-operator tickets allowing travel on all bus services in the area, which can have a compounding effect on prices.85 Evidence measuring transport systems in the UK's major cities outside London relative to Western European counterparts shows that urban public transport commutes to European city centres are easier and faster than in the UK.86

How will this mission be measured? Several metrics can be used to assess progress in achieving this mission. For Great Britain, the Department for Transport (DfT) produces estimates on the "modal share" for method of travel to work by region of workplace at the ITL1 regional level (Figure 5). This is a headline metric for the mission. The other headline metric is the average journey time to centres of employment, 87 with the data broken down by modes of transport and at lower tier local authority level in England. These measures provide robust indicators of the impact of improved standards. However, they do not explicitly tell us whether good standards have been met. Supporting metrics on bus punctuality and reliability,88 measured over the ITL1 regions of England, will help to identify whether connectivity and service quality improves. Additionally, a supporting metric covering the proportion of all journeys that are public transport will be monitored for the ITL1 regions of England.

⁸³ DfT. Bus Back Better Strategy. pg.18. 2021. DfT analysis finds bus schemes deliver benefits worth four times their cost;

NatCen. Transport and inequality: An evidence review for the Department for Transport. 2019.

⁸⁴ DfT. Journey time statistics, England: 2019. 2021.

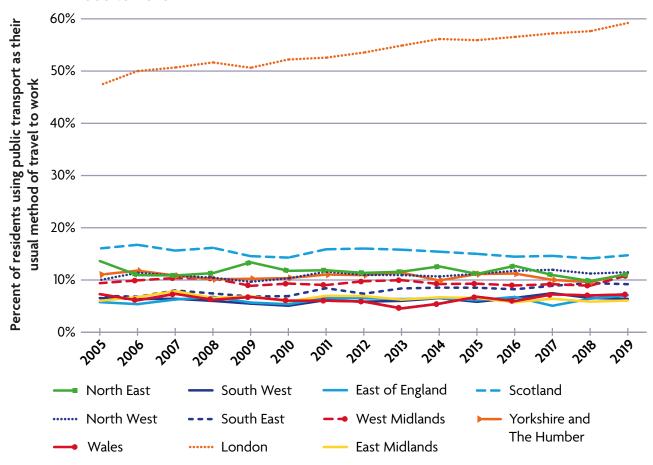
⁸⁵ DfT. Bus Back Better Strategy. 2021.

⁸⁶ Rodrigues, G., Breach, A. Measuring up: Comparing public transport in the UK and Europe's biggest cities. Centre for cities. 2021.

⁸⁷ Containing more than 5,000 jobs.

⁸⁸ DfT. Bus reliability and punctuality (BUS09). 2021.

Figure 5 Percentage of residents using public transport as their usual method of travel to work by region of workplace, GB countries and regions, 2005 to 201989



New approaches to measuring connectivity are being developed, such as a National Infrastructure Commission metric that accounts for population density and distance travelled. Building on these innovations, DfT is also developing a new measure to estimate connectivity between regions and places, that will support the measurement of this mission.⁹⁰

Moving closer to London standards means improving public transport reliability, capacity and integration through measures such as bus and cycling priority lanes. It does not necessarily mean replicating the Transport for London model and its underground system in all cities in the UK. In some cases, cities will need to look to the standards and solutions seen in European counterparts to measure ambition. This is also true when comparing urban centres and rural towns, which will need to measure only the relevant aspects of "London standards" such as reliability. Using these metrics to monitor improved transport connectivity will require the development of appropriate local benchmarks to ensure areas around city regions and rural areas are not left behind.

DfT. Transport Statistics Great Britain - Modal comparisons (TSGB0109). 2021.

For example: the connectivity metric produced to support the National Infrastructure Commission's Rail Needs Assessment. 2018.

Is this mission ambitious, specific and achievable? Achieving this mission would see public transport connectivity improvements across all areas where performance is currently lagging and reverse trends of divergence between London and the rest of the UK. This would show up in the total modal share of public transport and active travel (cycling, walking) trips in the regions moving towards London levels rather than moving away. Existing evidence suggests that there are significant regional disparities across these measures. For example, in 2018–19 public transport mode share in London stood at a high of 30% versus just 5% in the South West. For urban cities and towns, the average was just 6%. 91 Similarly, in 2019–20, the proportion of adults cycling once per week stood at a high of 14% in London versus 9% in the West Midlands. 92

Bringing public transport closer to London standards in Scotland, Wales and Northern Ireland will require close collaboration with the devolved administrations who are each responsible for provision of public transport. This engagement will take account of the existing transport landscape and commitments from the devolved administrations to drive up public transport standards.

Mission 4: By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.94

Key related capital(s): Physical capital

Principal objective(s): boosting productivity, pay, jobs, and living standards by growing the private sector, especially in those places where they are lagging

How does this mission relate to spatial disparities? High-quality digital infrastructure is essential for positioning the UK to take advantage of technological advances and improve living standards and well-being. This mission is directed at addressing spatial disparities in digital infrastructure provision. Densely populated areas of the UK have world-class infrastructure. But the rate of rollout to more sparsely populated areas has been slower, 95 as the economic incentives for the private sector to provide services to these communities are less clear cut. Achieving this mission would contribute to increased economic growth, innovation and productivity through improved digital connectivity in all places, as well as supporting those that are vulnerable or disadvantaged to access high-quality services.

Digital infrastructure is an important element of physical capital. It allows knowledge and ideas to circulate smoothly and cheaply, and encourages more efficient business practice. These effects are more important now than ever with the onset of widespread hybrid working. While 97% of premises in the UK can already access superfast speeds thanks to the Government's £2bn Superfast Broadband Programme,96 this mission will ensure that almost all premises in the UK have access to the gigabit-capable networks they will need for the future, as demand for data rapidly increases.

How will this mission be measured? The headline metrics for this mission are geographical 4G coverage and premises coverage of gigabit broadband. Good 4G coverage is currently available from at least one major network operator in 92% of the UK,97 up from 80% in 2017. Places not receiving any coverage are concentrated in rural areas. Gigabit broadband is currently available in 63% of UK premises, 98 again with maximum availability being concentrated in major urban centres. The areas with no availability are predominantly rural. The metrics for this mission will be tracked at lower tier local authority level using Office of Communications (Ofcom) and Think Broadband data. Ambitions for 5G, including measurement, are pending further research and consultation.

⁹³ Where 'nationwide' means 95% of the UK landmass for 4G (this combined coverage is expected to be achieved for the UK by the end of 2025) and at least 99% of premises for gigabit-capable broadband.

⁹⁴ The UK Government will be reviewing the 5G ambition, to ensure it accurately reflects the needs of consumers, businesses and the public sector over the next decade.

Ofcom. Connected Nations update: Summer 2021, 2021. 95

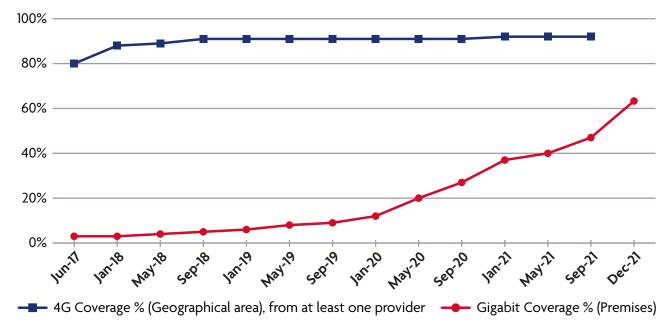
⁹⁶ Thinkbroadband. Local Broadband Information. Accessed: January 2022.

⁹⁷ Ofcom. Connected Nations update: Summer 2021, 2021.

Local Broadband Information, *Think Broadband*. 98



Figure 6 4G and Gigabit Coverage, UK, June 2017 to December 2021¹⁰¹



Mobile connectivity revolution to boost the Union, DCMS. 99

¹⁰⁰ As part of the forthcoming Wireless Infrastructure Strategy, due for publication in 2022, HMG will review the 5G target.

^{101 4}G coverage from: Ofcom. Connected Nations update: Summer 2021, 2021; Gigabit coverage from: Local Broadband Information, Think Broadband.

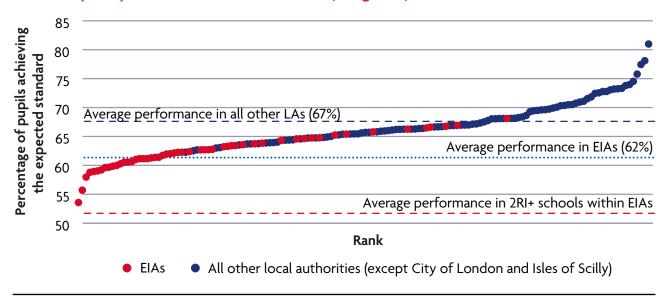
Mission 5: By 2030, the number of primary school children achieving the expected standard in reading, writing and maths will have significantly increased. In England, this will mean 90% of children will achieve the expected standard, and the percentage of children meeting the expected standard in the worst performing areas will have increased by over a third.

Key related capital(s): Human Capital

Principal objective(s): Spreading opportunities and improving public services, especially in those places where they are weakest

How does this mission relate to spatial disparities? This mission is directed at improving literacy and numeracy and reducing spatial disparities in educational attainment among primary school children across all parts of the UK, with a focus on the worstperforming areas. Education is the foundation for building human capital. It plays a crucial role in allowing people to build skills and reach their potential. It also enables people to participate in their community and affects their quality of life. 102 Improving education in the worstperforming areas is a targeted way of spreading opportunity and improving prosperity across the UK. Currently in England, attainment in poorly-performing areas is 62%, 103 compared to 67% in all other local authorities. Figure 7 shows that these areas have poorer outcomes at key stage 2 than other local authorities, and that pupils in a specific set of schools that have received at least two successive "Requires Improvement" Ofsted judgements (2RI) within these areas perform significantly worse, with just 52% achieving expected standards.

Figure 7 Rank of local authorities according to reading, writing, and maths performance at key stage 2 split between Education Investment Areas (EIAs) and other local authorities, England, 2019¹⁰⁴



¹⁰² Burgess, S. Human Capital and Education: The State of the Art in the Economics of Education. 2016.

¹⁰³ For the purposes of this analysis, 'poorly-performing areas' refers to Education Investment Areas, which have been selected based on historic poor performance at key stage 2 and key stage 4, or where existing place-based programmes are in place in local authorities.

¹⁰⁴ Department for Education. Education Investment Areas: selection methodology, 2022.

How will this mission be measured? The headline metric for this mission is the proportion of students who reach the expected level in reading, writing and maths at key stage 2 (and equivalent) nationally and in the third of Education Investment Areas (upper tier local authorities) with the lowest levels of attainment in England. Educational attainment at an early stage has lifelong implications, including the likelihood of entering higher education. Attainment in reading, writing and maths is a good indicator of whether children are gaining the critical skills they need to succeed at secondary school and later participate in society and the workforce.

Is this mission ambitious, specific and achievable? Recent trends suggest that attainment at key stage 2 in the worst performing areas in England has increased slightly over the last few years.¹⁰⁵ Achieving this mission would mean that the worst performing schools in the bottom third of local authority areas improve faster than other schools, raising their performance substantially. This would also include catching up lost learning due to COVID-19. Achieving this level of ambition would require a significant improvement at key stage 2 in all of the 2RI schools in the worst-performing parts of England.

Achieving the stated ambition will require concerted effort across government, alongside local authorities, schools and other local stakeholders, to boost school quality, improve early years education and to reduce barriers to succeeding at school. Increasing the proportion of primary school pupils reaching the expected standard of reading, writing and maths in Scotland, Wales and Northern Ireland will require close collaboration with the devolved administrations who are each responsible for delivering education services. Engagement will take account of different national performance standards and existing commitments to improve performance.

Mission 6: By 2030, the number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowestskilled areas.

Key related capital(s): Human Capital

Principal objective(s): Spreading opportunities and improving public services, especially in those places where they are weakest

How does this mission relate to spatial disparities? This mission is aimed at making sure skill levels rise in all areas of the country, and particularly in the places where they are the weakest, so that more people have the skills they need to get good jobs. Skills are a crucial driver of economic disparities between people and places. Boosting skills improves human capital and is a clear way to improve the earnings potential and life chances of people who have already left school.¹⁰⁶ The mission is targeted at those currently outside of the education system who will still represent 80% of the labour force in 2030. Figure 8 below shows the decline in skills achievements in England, a trend that is mirrored in areas with the lowest levels of skills.

Figure 8 Adult (19+) funded further education and skills (including apprenticeships achievement and excluding community learning), England, 2011–12 to 2020-21107



How will this mission be measured? The headline metric for this mission is the number of adults who are successfully completing high-quality skills training. Achieving or completing skills training is closely associated with positive outcomes, such as further training, employment and higher wages, and is therefore a good measure of whether people are acquiring the skills they need to make them more productive and succeed in a modern and changing economy.¹⁰⁸ The baseline calculations for this metric include qualification-focused 19+ Further Education and skills training achievement (including apprenticeships), but not Higher Education.

Training within the scope of this mission needs to be high-quality training that matches the needs of local employers and builds capabilities, to ensure it improves economic and social outcomes. This mission focuses on the third of upper tier local authorities where skill levels, defined as the share of the population with level 3+ qualifications, are lowest. Training and retraining in skills is central to the success of the local economy, particularly as Further Education learners and adults tend to be less geographically mobile.

A combined measure of achievements in level 4 and 5 across the FE and HE sectors is under development, which builds on the recent Higher Level Learners in England report.¹⁰⁹ As this work progresses, incorporating this data into the headline metric will be explored. The Department for Education (DfE) will also monitor broader measures of private employers' investment in training to provide a holistic picture of skills achievements and will continue to track learner outcomes to ensure that skills achievements are maximising returns to both the individual and society.

Is this mission ambitious, specific and achievable? Skills participation and achievements have been declining significantly over the past 10 years, including in areas with the lowest skills. Achieving this mission would require turning around this stubbornly persistent downwards trend and driving increases in the numbers successfully completing training over the next ten years. COVID-19 has affected achievements over recent years, so the mission is being set relative to a 2018–19 (i.e. pre-COVID-19) baseline. The further reduction in achievements in the following two academic years means that the 200,000 increase represents an increase of over 50% compared to 2020–21. 111

The low training rates over the last decade or so suggest that there is a stock of low-skilled workers who have the potential to be retrained and/or upskilled, to make the most of the real term increase in government funding to 2024. Achieving this mission will depend on action across government, as well as local authorities and Mayoral Combined Authorities (MCAs), employers and skills providers. It will require a shift in skill provision, to ensure that more people can access training that provides the stepping stone to improved jobs and pay. It also likely requires strong communications both from government and the private sector to emphasise the importance of skills training, as a core barrier to uptake is people not feeling training is worth the time or money.

¹⁰⁸ DFE. Further Education: Outcome-based success measures, 2018/19. 2021.

¹⁰⁹ DFE. Higher Level Learners in England, 2018/19. 2021.

¹¹⁰ DFE. Further education and skills: March 2021. 2021.

¹¹¹ DFE. Further education and skills: March 2021 2021.

In addition to raising the number of achievements, it is also important to continue to improve the quality of training and better align achievements with employer needs. By 2030, almost all technical courses in England will be on employer-led standards, ensuring that the education and training people receive is directly linked to the skills needed for jobs. The qualifications review will remove funding for low-quality courses and prioritise those aligned to employer-led standards. Reforms to provider funding and accountability will help develop a system that empowers and enables the sector to deliver high-quality skills. These reforms will mean that taxpayer, as well as employer, investment in skills can be directed more effectively - delivering better outcomes for the economy.

Increasing the proportion of people completing high-quality skills training in Scotland, Wales and Northern Ireland will require close collaboration with the devolved administrations who are each responsible for delivering skills programmes. This engagement will take account of the existing skills landscape and commitments from the devolved administrations to drive up participation.

Mission 7: By 2030, the gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by five years.

Key related capital(s): Human Capital

Principal objective(s): Spreading opportunities and improving public services, especially in those places where they are weakest

How does this mission relate to spatial disparities? This mission aims to improve Healthy Life Expectancy across the UK, improving health, well-being and productivity, and reducing pressure on public services. Health is a national asset: a healthy, resilient population means a healthy, resilient society and economy. Good health is a key determinant of people's well-being, 112 their ability to work 113 and a key element of human capital. 114

However, there are stark differences in HLE across the UK. On average, those living in the highest decile of local authorities by HLE can expect around 10.6 more years of good health than those living in the lowest decile. Not only is the gap large, but it has remained at comparable levels between 2013–15 and 2017–19, as shown by Figure 9. Achieving this mission would significantly improve health across the UK as a whole, contributing to expanding opportunities and increasing productivity by keeping people healthier, and preventing people falling out of work due to their ill health. Furthermore, achieving this mission on spatial disparities should also help to reduce ethnic and socioeconomic disparities, given the intersections between them.¹¹⁵

¹¹² ONS. Measures of National Well-being Dashboard. 2019.

¹¹³ ONS. Health state life expectancies, UK: 2017 to 2019. 2021.

¹¹⁴ ONS. <u>Human capital estimates</u>, <u>UK: 2004 to 2017</u>. 2018.

¹¹⁵ Duque, M., Mcknight, A. <u>Understanding the Links between Inequalities and Poverty (LIP) Understanding the relationship between inequalities and poverty: a review of dynamic mechanisms</u>. 2019; DHSC. <u>Advancing our health: prevention in the 2020s</u>. 2019.

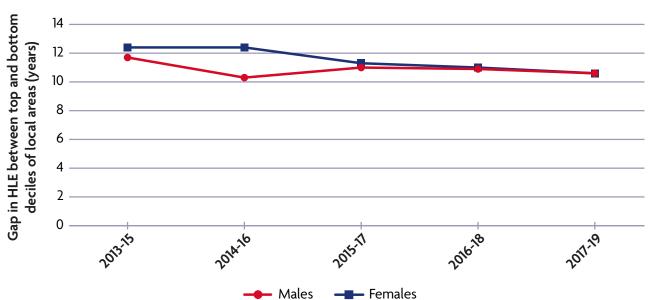


Figure 9 Gap in Healthy Life Expectancy (HLE) between the highest and lowest deciles of local areas (Males and Females), UK, 2013-15 to 2017-19116, 117

How will this mission be measured? The mission will be measured using the ONS HLE at birth statistic. This is an estimate of the average number of years a person would live in a state of "very good" or "good" health, based on how individuals perceive their general health. This estimate assumes the particular area's age- and gender-specific mortality rates throughout the lifespan, based on the current health of the population. This metric will be measured over upper tier local authorities in England, local authorities in Wales, council areas in Scotland and local government districts in Northern Ireland. The gap referenced in the mission will be measured as the difference between the median HLEs in the top and bottom deciles of local authorities, when ranked by HLE.

Is this mission ambitious, specific and achievable? At a national level, HLE remained relatively flat between 2009-2011 and 2017-2019, increasing by 0.2 years for males and decreasing by 0.5 years for females. 119 Data for HLE reflecting the impact of the COVID-19 pandemic is not yet available, but there may be a detrimental impact on HLE. Achieving this mission will require ending this stagnation and reversing any detrimental impact on HLE due to COVID-19. Turning to disparities in HLE between places, the gap between the highest and lowest deciles of local authorities is large, standing at 10.6 years for both males and females in 2017-19 (also shown in Figure 9).

¹¹⁶ ONS. Health state life expectancy, all ages, UK 2021.

¹¹⁷ Local areas refer to upper tier local authorities in England, local authorities in Wales, council areas in Scotland and local government districts in Northern Ireland.

¹¹⁸ ONS. Health state life expectancies by national deprivation deciles, England: 2017 to 2019. 2021.

¹¹⁹ ONS. Health state life expectancy, all ages, UK. 2021.

This mission is ambitious, but there are actions that can be taken to improve people's health. Achieving this mission will require collaborative and innovative effort from across government, civil society and health systems to address the key drivers of health disparities, including an ambitious set of proposals to go further on reducing disparities in health from DHSC in the forthcoming Health Disparities White Paper. In particular, it will be important to prevent ill health by acting across underlying factors such as housing, and ensuring that progress is made on specific health risks, such as smoking and obesity, as well as tackling some of the biggest killers and causes of ill health, such as cancer, cardiovascular disease, musculoskeletal conditions and mental ill health.

Narrowing gaps in HLE in Scotland, Wales and Northern Ireland will require close collaboration with the devolved administrations who are each responsible for delivering health services.

Mission 8: By 2030, well-being will have improved in every area of the UK, with the gap between top performing and other areas closing.

Key related capital(s): All Principal objective(s): All

How does this mission relate to spatial disparities? Well-being captures the extent to which people across the UK lead happy and fulfilling lives - the overarching objective for levelling up. It allows us to understand how the capitals combine and impact on individuals' lived experience across different areas of the country. The What Works Centre for Wellbeing¹²⁰ highlights that "almost everything in our lives affects well-being" and that physical and mental health, jobs and living standards, and family and community relationships, among other things such as environment and green space, all play a role in driving well-being.

Measures of well-being, such as life satisfaction, serve as a summary statistic on that lived experience. Disparities in well-being are complex and can be hyper-localised. Existing wellbeing measures suggest that there are large and persistent disparities at both a regional level and local level (Figure 10). Like living standards, well-being depends on all six capitals. However, it differs from the picture on productivity, pay and employment with prosperous areas such as London reporting the lowest reported levels of well-being. 121, 122 As Chapter 1 indicates, factors such as people's mental and physical health, quality of work and housing have a role in explaining their lived experiences in different places.

¹²⁰ Brown, H., Abdallah, S., Townsley, R. *Understanding Local Needs for well-being Data*. 2017.

¹²¹ ONS. Annual personal well-being estimates. 2021.

¹²² As Chapter 1 indicates, factors such as people's mental and physical health, quality of work and housing have a role in explaining their lived experience in different places.

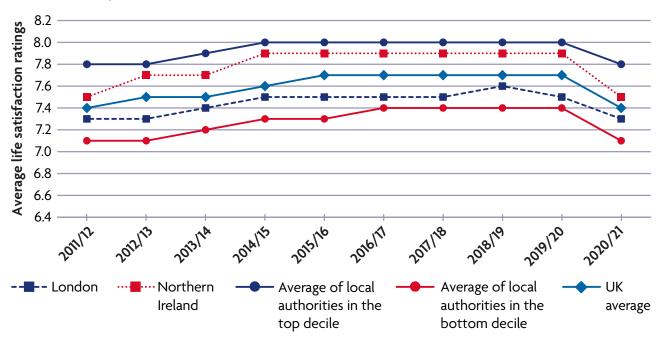


Figure 10 Average life satisfaction ratings across top and bottom performing areas, UK, 2011–12 to 2020–21¹²³

How will this mission be measured? The ONS measures of personal well-being will be used as a starter to help monitor the progress of this mission. There are four well-being metrics: life satisfaction, whether we feel the things we do in life are worthwhile, happiness, and anxiety, with questions covering these dimensions represented on multiple ONS and wider government surveys. These metrics complement each other as they take into account different methods for assessing well-being. Each metric will be measured at the local authority level.

This mission builds on the extensive research on well-being over the past decade, including recent supplementary guidance on how to appraise well-being in the latest Green Book update. However, this mission requires further work to identify a basket of metrics that will allow for an expansive measurement and tracking of progress on this mission at lower spatial levels. Ongoing research will explore how well-being is affected by various outcomes and policy actions. Further work is also required to understand the impact of COVID-19 on trends in well-being, both in the short and longer term, as this will have implications for the mission.

Is this mission ambitious, specific and achievable? This mission is exploratory. In order to set a credible and specific mission, the UK Government will undertake further work to supplement existing data on well-being at a subnational level, as well as to understand the drivers of well-being and identify the most impactful levers available to policymakers.

¹²³ ONS. Personal well-being estimates, April 2020 to March 2021 - local authority

¹²⁴ ONS. Surveys using our four personal well-being questions. 2018.

¹²⁵ HM Treasury. Green Book supplementary guidance: wellbeing. UK Green Book. 2021.

Mission 9: By 2030, pride in place, such as people's satisfaction with their town centre and engagement in local culture and community, will have risen in every area of the UK, with the gap between top performing and other areas closing.

Key related capital(s): Institutional capital and Social capital

Principal objective(s): Restoring a sense of community, local pride and belonging, especially in those places where they are slipping

How does this mission relate to spatial disparities? The extent to which people are satisfied with the place they live in varies significantly across the UK (Figure 11).¹²⁶ Local area satisfaction is connected to a number of variables including community engagement, local heritage, engagement in cultural life, access and quality of local amenities, and quality of town centres. These vary considerably across the UK and further research is required to understand what drives these variables.¹²⁷ Improvements are an essential component in building stronger and more cohesive communities. This mission is about strengthening social and institutional capital in left-behind areas, both crucial elements in driving long-term levelling up outcomes.

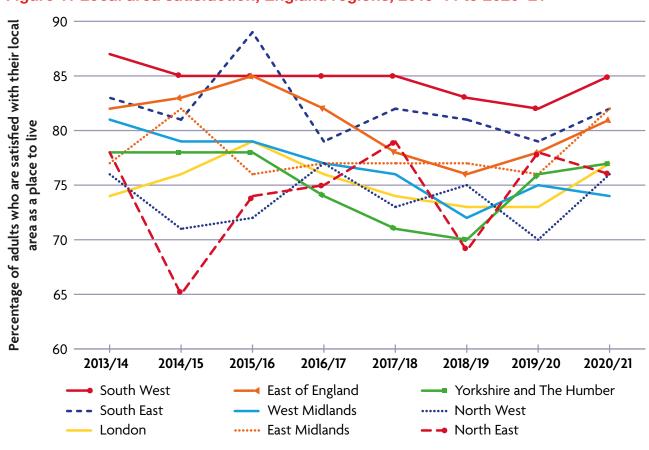


Figure 11 Local area satisfaction, England regions, 2013–14 to 2020–21¹²⁸

¹²⁶ DCMS. Community Life Survey Reference Tables - Table B7. 2021.

¹²⁷ The Cares Family., Power to Change. Building our social infrastructure: Why levelling up means creating a more socially connected Britain. 2021.

¹²⁸ DCMS. Community Life Survey. 2021.

How will this mission be measured? Survey-based measures of pride in place are still in their infancy. These measures are subjective and, in some cases, not yet developed or designed to enable analysis at a spatial level. For example, the Department for Digital, Culture, Media & Sport (DCMS) runs the Community Life Survey, which measures aspects such as "sense of belonging". However, these data cover England only and can only be broken down into very large spatial units. Likewise, think tanks such as Local Trust and Demos have made progress in researching what matters for pride in place and local area satisfaction. The UK Government intends to carry out further work to identify and develop the most appropriate measures of pride in place, improve the evidence base on what determines it and assess how policies might be designed to improve it, especially in communities where it is low.

There are considerable challenges to developing measures for pride of place. For example, there is currently no recorded measure of satisfaction with town centres and it will take time to expand existing surveys and collect enough data to identify trends and disparities. Additionally, further work is required to understand how measures such as town centre satisfaction and engagement in local culture and community respond to the levers available to government among other factors, how to define these measures, and how to best isolate the effect of interventions in the data.

Is this mission ambitious, specific and achievable? This mission is exploratory. In order to set a credible and specific mission, the UK Government will undertake further work to supplement existing data on pride in place at a subnational level, as well as to understand the drivers of pride in place and identify the most impactful levers available to policymakers.

Mission 10: By 2030, renters will have a secure path to ownership with the number of first-time buyers increasing in all areas; and the government's ambition is for the number of non-decent rented homes to have fallen by 50%, with the biggest improvements in the lowest-performing areas.¹³¹

Key related capital(s): Social capital, Human capital and Physical capital

Principal objective(s): Restoring a sense of community, local pride and belonging, especially in those places where they are slipping

How does this mission relate to spatial disparities? This mission aims to provide a path to home ownership for first-time buyers and improve the standard of housing in the UK. Home ownership is associated with stronger social capital, including higher levels of trust, an increased sense of belonging and more investment in local areas.¹³² There is also some evidence that it improves children's educational attainment, 133 and future labour market earnings.134

However, in England, the proportion of households that own their home has fallen in all regions since 2003-04, ranging from 10pp in London to 5pp in the North East (Figure 12). 135, 136, 137 A key driver has been deteriorating affordability ratios in every region over the past 20 years making it more challenging for people to purchase their first home. Through improving access to home ownership, this mission seeks to give people a greater stake in society and improve pride of place.

¹³¹ Government will consult on the impact on the private rented market and particularly those on the lowest incomes. Further detail will be set out once the review of the Decent Homes Standard has concluded.

¹³² Department for Levelling Up, Housing and Communities., Ministry of Housing, Communities & Local Government. English Housing Survey. 2019.

¹³³ Haurin, D.R., Parcel, T.L., Haurin, R.J. Does home ownership affect child outcomes?. Real Estate Economics 30 635-666. 2002.

¹³⁴ Fischer, C.S. To Dwell among Friends: Personal Networks among Town and City. University of Chicago Press, Chicago. 1982.

¹³⁵ Department for Levelling Up, Housing and Communities. Ministry of Housing, Communities & Local Government. English Housing Survey. 2021.

¹³⁶ Affordability ratios showing median house prices as a multiple of median earnings: ONS. House price to workplace-based earnings ratio, 2002 to 2020. 2021.

¹³⁷ Home ownership rates are a function of FTBs, mortality and the number of people moving from their own home to rental accommodation. Consequently, they are an imperfect proxy for first time buyers.

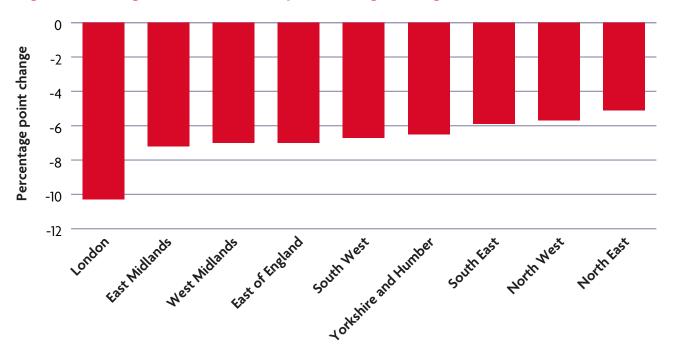


Figure 12 Change in homeownership rates, England regions, 2003 to 2020¹³⁸

At the same time, poor quality housing is damaging to people's health and well-being, and holds people back from fulfilling their potential.¹³⁹ Consequently, improving housing quality should improve people's ability to participate in the workforce and society, and improve pride in place. This is a particular challenge in rental accommodation – which accommodates 35% of England's households – where tenants are subject to decisions made by their landlords.¹⁴⁰ The quality of rental housing varies considerably across the UK, with as many as 34% of privately rented homes being non-decent in Yorkshire and the Humber, compared to 17% in the South East.¹⁴¹ Accordingly, the mission aims to ensure everyone has access to good quality housing, with a particular focus on improving areas where quality is worst.

How will this mission be measured? For home ownership, the intention is to use first-time buyer numbers per year, by England region. This metric best captures the extent to which the UK Government is delivering a viable path to home ownership for existing renters. However, there are currently no official UK Government statistics that provide this data at a regional level. Data from the English Housing Survey (EHS) shows the number of recent (in the last three years) first-time buyers, but due to limited sample sizes this is only broken down by London vs. the rest of England. The UK Government is committed to developing a public metric for annual first-time buyer numbers at the sub-national level within the next year.

¹³⁸ Department for Levelling Up, Housing and Communities. Ministry of Housing, Communities & Local Government. *English Housing Survey*. 2021

¹³⁹ BRE. Report finds poor housing is costing NHS £1.4bn a year. 2021.

¹⁴⁰ Department for Levelling Up, Housing and Communities., Ministry of Housing, Communities & Local Government. *English Housing Survey*. 2021.

To note: despite the mission covering the social rental sector these statistics are for the private rented sector only. Source: Department for Levelling Up, Housing and Communities, Ministry of Housing, Communities & Local Government. *English Housing Survey*. 2021.

Ahead of these data being made public, supporting metrics drawn from the EHS will be used to track home ownership trends.

The headline metric for housing quality is the proportion of renters living in housing that does not meet the decent homes standard. The Decent Homes Standard is being reviewed to ensure it is fit for the present day, and the UK Government's intention is to apply it across all rented tenures. The UK Government will consult on the impact on the private rented market, and particularly those on the lowest incomes. Further detail will be provided once the Decent Homes Standard review has concluded. The measure is limited to renters as it is in the private and social rented sectors where concerted action is needed to improve quality, as tenants have less ability to make improvements for themselves. The UK Government also has greater levers to effectively drive change in these sectors. Currently, housing quality can only be measured at the ITL1 level in England. The metric will look at outcomes in all regions in England, as all areas have pockets of poor outcomes.

Is this mission ambitious, specific and achievable? To achieve this mission by 2030, the UK Government will build on previous schemes and continue to support first-time buvers through a range of ownership policies, including the First Homes programme. This mission is also underpinned by a commitment to continue work with mortgage lenders to maximise the availability of high loan-to-value mortgages, and to continue to ramp up housebuilding to address the underlying affordability issues that first-time buyers face.

Halving the number of non-decent rented homes would require a considerably faster rate of improvement than the current trajectory. If the rate of improvement from the last five years was to continue until 2030, the number of non-decent homes would drop by around 10%.142 To achieve this mission the UK Government will use policy levers that require landlords in both the private and social rented sectors to make improvements where they own poor-quality properties. Critical policy initiatives to deliver this mission will include the forthcoming Social Housing Regulation Bill and the Private Rented Sector White Paper.

Increasing the number of first-time buyers and reducing the number of non-decent rented homes in Scotland, Wales and Northern Ireland will require close collaboration with the devolved administrations who are each responsible for housing policies. Engagement will take account of the existing housing landscape and commitments from the devolved administrations to drive up home ownership and housing quality.

Mission 11: By 2030, homicide, serious violence and neighbourhood crime will have fallen, focused on the worst-affected areas.

Key related capital(s): Social capital

Principal objective(s): Restoring a sense of community, local pride and belonging, especially in those places where they have been lost

How does this mission relate to spatial disparities? Everybody is entitled to feel safe at home and in their local communities. Crime affects how secure people feel in their local area, which is a key element of social capital. In addition, it has detrimental impacts on the well-being of victims and can impact on the physical and mental health of people in local communities.^{143, 144} Crime can also deter investment in local areas which can negatively affect the quality of jobs created.¹⁴⁵

The majority of crimes are committed in large metropolitan areas, reflecting both large residential populations and high levels of footfall. However, there are also smaller areas with high crime rates, although these are less significant in terms of volume, such as deprived coastal areas. This clustering of crime means that there are large spatial disparities in crime rates. Between 2007–8 and 2017–18, the average homicide rate per population in the 10% most deprived areas in England and Wales was approximately seven times greater than the rate in the 10% least deprived. Further, nearly a quarter of all neighbourhood crime in 2018–19 took place in just 5% of areas (Lower Layer Super Output Areas).

How will this mission be measured? The headline metrics for this mission are homicides, serious violence and neighbourhood crime. Police-recorded data will be used to measure homicide and NHS hospital admissions data for under 25s will be used to measure serious violence. Both datasets are available at the police force area level. The worst-affected areas for both homicide and serious violence will be defined as the 18 forces with the largest volumes of hospital admissions over a three-year period (2015–16 to 2017–18). For neighbourhood crime, the worst-affected areas will be identified using police-recorded crime data and neighbourhood crime levels will be tracked for the worst-affected areas in aggregate, using Crime Survey data (see Figure 13 for the overall trend). An expansion of the Crime Survey is being explored that would support more accurate estimates of neighbourhood crime levels in these areas and will provide a richer picture of what is happening to neighbourhood crime levels at police force area level.

¹⁴³ ONS. Chapter 3: Personal Well-being and crime. 2015.

¹⁴⁴ Lorenc, T., Petticrew, M., Whitehead, M., et al. <u>Crime, fear of crime and mental health: synthesis of theory and systematic reviews of interventions and qualitative evidence</u>. Public health research, No. 2.2. 2014.

¹⁴⁵ Rosenthal, Ross. Violent crime, entrepreneurship, and cities. 2010.

¹⁴⁶ ONS. Crime in England and Wales: Police Force Area data tables. Accessed January 2022.

¹⁴⁷ Internal Home Office analysis of Police.UK data at Lower Layer Super Output Area level (LSOA)

¹⁴⁸ Home Office. *Trends and drivers of homicide: Main findings*. 2020.

¹⁴⁹ Home Office. Safer Streets Fund (2021-2022) Prospectus. 2021

¹⁵⁰ The police-recorded homicide data is available for police force areas in England and Wales and the hospital admissions data for under 25s is available for police force areas in England.

¹⁵¹ These areas are listed *here*.

TCSEW not directly 3500 comparable to CSEW. Number of Neighbourhood 3000 2500 2000 1500 1000 500 Telephone-operated Crime Survey Crime Survey for England and Wales estimates for England and Wales

Figure 13 Estimates for Neighbourhood Crime incidents, based on Crime Survey responses, England and Wales, 2011-12 to 2020-21152

Is this mission ambitious, specific and achievable? Homicide and serious violence in the 18 worst-affected areas both rose from lows in 2014–15 to peaks in 2017–18. Since then, there have been decreases but levels remain above 2014-15 levels. 153, 154 Focusing on the worst-affected areas is likely to have a significant impact on the national picture. These areas accounted for 70% of homicide in England and Wales in the year to June 2021¹⁵⁵ and have consistently accounted for over 80% of all serious violence episodes among the under-25s since 2012–13.156 Neighbourhood crime has fallen over the past decade, including substantial decreases since the onset of the pandemic (Figure 13).157, 158

¹⁵² ONS. Crime in England and Wales: year ending June 2021.

¹⁵³ Data relating to homicide is available at: ONS. Crime in England and Wales: Police Force Area data tables. Accessed January 2022.

¹⁵⁴ Data relating to serious violence is available at: NHS Digital. Monthly hospital admissions for assault by sharp object in England - September 2021. 2021.

¹⁵⁵ ONS, Crime in England and Wales: Police Force Area data tables. Accessed January 2022.

¹⁵⁶ Internal Home Office Analysis. Data for police force areas in England is available at NHS Digital, Monthly hospital admissions for assault by sharp object in England - September 2021. Data for police force areas in Wales is not publicly available.

¹⁵⁷ ONS. Crime in England and Wales: Appendix tables. Accessed January 2022.

¹⁵⁸ Neighbourhood crime is comprised of domestic burglary, theft from the person, robbery and vehicle crime.

Mission 12: By 2030, every part of England that wants one will have a devolution deal with powers at or approaching the highest level of devolution and a simplified, long-term funding settlement.

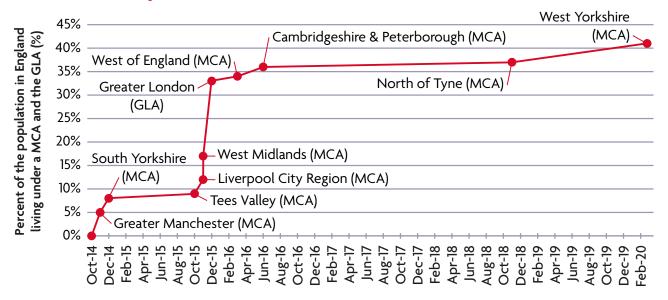
Key related capital(s): Institutional Capital

Principal objective(s): Empowering local leaders and communities, especially in those places lacking local agency

How does this mission relate to spatial disparities? Strong, empowered local leadership is at the heart of the UK Government's approach to levelling up. Levelling up will only be successful if local actors are empowered and provided with the funding stability and flexibility to build the institutional capital required for places to develop long-term solutions that work for their communities.

How will this mission be measured? This mission will be measured using a basket of objective and subjective metrics. This includes the proportion of the population living in an area with the highest level of local devolution in England (Figure 14). It will also consider a range of options for supplementary metrics such as survey measures of people feeling involved in decision-making and expenditure-based measures used to proxy the degree of decentralisation of decision-making.

Figure 14 Percentage of the population living under a Mayoral Combined Authority (MCA) and the Greater London Authority (GLA), England, October 2014 to February 2020¹⁵⁹



Is this mission ambitious, specific and achievable? At present, only 41% of the English population are covered by a devolution deal, and London, Greater Manchester and the West Midlands are responsible for almost two-thirds of this. 160 Even in areas where devolution has taken place, many areas do not have the same range of powers as Greater Manchester or London. Achieving the stated mission will require accelerating progress to date, going further and deeper on existing deals, and extending devolution beyond the urban areas that have typically benefited the most from devolution. As part of this, local leaders will be empowered with greater funding stability and flexibility to plan for future priorities.

Achieving this mission will require implementation of the new devolution framework in England set out in Chapter 2. This will provide a clear and consistent set of pathways enabling areas to widen and deepen their devolved powers, supporting more places to reach the preferred model of devolution. The flexibility provided by County Deals will allow more areas beyond urban conurbations to access devolution, while still being at a suitable spatial scale to drive agglomeration in functional economic geographies.

Measuring the progress in levelling up

The UK government has identified a preliminary suite of metrics to support monitoring and evaluation of progress against the 12 missions and the four high-level objectives of the levelling up programme.¹⁶¹

These metrics will help to address a number of measurement challenges. **Headline metrics** are the principal tool for describing the specific disparities that missions are aiming to address and for monitoring developments against the missions. They will be tracked regularly to ensure sufficient progress is being made. Supporting metrics capture information relevant to, but broader than, the specific mission. A combination of the headline and supporting metrics will provide a rich source of information on the evolution of spatial disparities in a broader levelling up context. It is envisaged that this information forms a crucial input to any evaluation of progress towards the missions.

Many of the metrics have been drawn from the list of metrics published at the 2021 Spending Review.¹⁶² The list has then been supplemented with a small number of additional metrics to reflect the focus and scope of the missions.

The list of metrics set out in Figure 15 are preliminary. They are neither exhaustive nor definitive at this stage. The UK Government plans to seek inputs from interested stakeholders through a period of engagement and informal consultation before they are finalised. This will involve academic experts, think tanks, civil society, frontline professionals, private industry and the ONS, as well as government departments. During this period of engagement, stakeholders will be encouraged to identify additional metrics that might improve measurement of missions or outcomes further. A selection of these metrics will be added to the preliminary list.

¹⁶¹ It should be noted that the COVID-19 pandemic has impacted on the baseline of many of the metrics. The future trajectory of the pandemic, including how the recovery takes shape, will have implications for how to track the various metrics.

¹⁶² In the 2021 Spending Review, the Government committed itself to ensure that spending decisions maximised value for money and produced real outcomes for citizens. The Government's priority outcomes were updated to ensure the principles of levelling up are at the heart of the commitments made in the 2021 Spending Review. To ensure these priority outcomes are delivered, the Spending Review tied together spending and performance by setting out priority outcomes for each government department and accompanying metrics to measure their progress.

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In particular, there are several areas that are relevant to levelling up, but where further work is needed to investigate, analyse or develop appropriate metrics before they can be used for measuring and monitoring progress at the right levels of geography. These include measures of:

- a. quality of work;
- b. work and health, in particular health-related worklessness;
- c. pride in place and well-being;
- d. long-term outcomes for those completing training;163 and
- e. local leadership.

Figure 15 Metrics for monitoring the progress against the levelling up missions and objectives

Objective	Mission	Metrics (Headline/Supporting)	
Boosting productivity,	Mission 1: By 2030, pay, employment and productivity will have risen in every area of the UK, with each containing a globally competitive city, with the	Gross Value Added (GVA) per hou worked	
pay, jobs and		Gross median weekly pay (£)	
living standards by		Employment rate for 16–64-year olds	
growing the private sector		Gross Disposable Household Income (GDHI)	
		Proportion of jobs that are low paid	
		Participation rate	
		Disability employment rate gap	
		Proportion of children in workless households	
		Proportion of employed people in skilled employment (SOC 1-3, 5)	
		Total value of UK exports	
		Inward and outward Foreign Direct Investment (FDI)	
	Mission 2: By 2030, domestic public investment in R&D outside the Greater	Business expenditure on R&D	
	South East will increase by at least 40%, and over the Spending Review	Government funding for R&D	
	period by at least one third. This additional government funding will seek to leverage at least twice as much private sector investment over the long term	Percentage of businesses that are innovation active	
	to stimulate innovation and productivity growth.	Inward and outward Foreign Direct Investment (FDI)	
	Mission 3: By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.	Usual method of travel to work by region of workplace	
		Average travel time in minutes to reach nearest large employment centre (500 + employees)	
		Percentage of non-frequent bus services running on time	
		Average excess waiting time for frequent (bus) services	
		Public transport trips as a proportion of total trips per year	
	Mission 4: By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.	Percentage of premises with gigabit-capable broadband	
		Percentage of 4G (and 5G) coverage by at least one mobile network operator	

¹⁶⁴ Supporting metrics for many of the other missions are expected to contribute to measuring and tracking of living standards, for example education and skills, health and well-being.

Objective	Mission	Metrics (Headline/Supporting)	
Spreading opportunity and improving	Mission 5: By 2030, the number of primary school children achieving the expected standard in reading, writing and maths will have significantly increased. In England, this will mean 90% of children will achieve the expected standard, and the percentage of children meeting the expected	Percentage of pupils meeting the expected standard in reading, writing and maths by end of primary school	
public services	standard in the worst performing areas will have increased by over a third.	Percentage of young people achieving GCSEs (and equivalent qualifications) in English and maths by age 19	
		Percentage of schools rated good or outstanding by Ofsted	
		Persistent absences for all pupils and disadvantaged and vulnerable cohorts of children	
		Percentage of 5-year olds achieving 'expected level' on literacy, communication and maths early learning goals	
	Mission 6: By 2030, the number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing	19+ Further Education and Skills Achievements (qualifications) excluding community learning, Multiply and bootcamps	
	courses in the lowest skilled areas.	Number of starts, and achievements, on apprenticeships per 1,000	
		Proportion of the population aged 16 – 64 with level 3+ qualifications	
		19+ further education and skills participation	
	Mission 7: By 2030, the gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by five years.	Healthy Life Expectancy (HLE)	
		Smoking prevalence of adults	
		Obesity prevalence - children and adults	
		Cancer diagnosis at stage 1 and 2	
		Under 75 mortality rate from cardiovascular diseases considered preventable (per 100,000 population)	
	Mission 8: By 2030, well-being will have improved in every area of the UK,	Average life satisfaction ratings ¹⁶⁵	
	with the gap between top performing and other areas closing.	Average feeling that things done in life are worthwhile ratings ¹⁶⁶	
		Average happiness ratings ¹⁶⁷	
		Average anxiety ratings ¹⁶⁸	

¹⁶⁵ The average rating of those that feel satisfied about their lives.

¹⁶⁶ The average rating of those that feel the things they do in life are worthwhile.

¹⁶⁷ The average rating of those that felt happy yesterday.

¹⁶⁸ The average rating of those that felt anxious yesterday.

Objective	Mission	Metrics (Headline/Supporting)	
Restoring a sense of community,	Mission 9: By 2030, pride in place, such as people's satisfaction with their town centre and engagement in local culture and community, will have risen in every area of the UK, with the gap between top performing and other	Percentage of adults who are satisfied with their local area as a place to live (E)	
local pride and belonging	areas closing.	Percentage of individuals who have engaged in civic participation in the last 12 months (E)	
	Mission 10: By 2030 renters will have a secure path to ownership with the number of first-time buyers increasing in all areas; and the government's	Proportion of non-decent rented homes	
	ambition is for the number of non-decent rented homes to have fallen by 50%, with the biggest improvements in the lowest performing areas.	Number of first time buyers	
		Recent first time buyers (last 3 years)	
		Net additions to the housing stock	
	Mission 11: By 2030, homicide, serious violence and neighbourhood crime will have fallen, focused on the worst-affected areas.	Neighbourhood crime	
		Homicide	
		Hospital Admissions for Assault with a Sharp Object amongst under-25s	
Empowering local leaders and	Mission 12: By 2030, every part of England that wants one will have a devolution deal with powers at or approaching the highest level of devolution and a simplified, long-term funding settlement.	Percent of the population living in an area covered by the highest level of devolution	
communities		We are currently exploring wider metrics to measure the empowerment of local leaders and communities. This will be further developed during the consultation process.	

(E) metrics are exploratory and may change.

Figure 16 shows the list of headline and supporting metrics, their geographical coverage, and source. It is important to note that the geographical coverage stated in this table aligns with the geographical area being measured in the levelling up missions.¹⁶⁹ Therefore, metrics might be available at a lower geographical level than stated in the table below.

These metrics were selected based on their relevance, availability, frequency of updates, geographical coverage (UK-wide and at lower levels of geography) and following recommendations from a range of stakeholders across the UK Government and devolved administrations.170

Most of the metrics are framed relative to the median local authority. While every effort has been made to select measures that are available at the lowest geographical level, for some measures it is more appropriate to measure at a higher level of geography. For example, measures such as research and development spending are more appropriate at the level of regions and countries (ITL1), whereas measures such as average life satisfaction are appropriate at local authority or even granular levels of geography.

Figure 16 List of metrics, geographical coverage and sources

Metric	Geographical coverage and source
Gross Value Added (GVA) per hour worked	UK, countries and regions ‡
	ONS
Gross median weekly pay (£) (N)	UK, countries and regions
	ONS
Employment rate for 16–64-year olds	UK, countries and regions
	ONS
Gross Disposable Household Income (GDHI) (N)	UK, countries and regions
	ONS
Proportion of jobs that are low paid (N)	UK, countries and regions
	ONS
Participation rate (N)	UK. countries and regions
	ONS
Disability employment rate gap	UK, countries and regions
	ONS
Proportion of children in workless households (N)	UK, countries and regions ‡
	ONS
Proportion of employed people in skilled employment (SOC 1-3, 5) (N)	UK, local authority
	ONS
Total value of UK exports	UK, countries and regions
	ONS
Business expenditure on R&D (N)	UK, countries and regions
	ONS
Government funding for R&D (N)	UK, countries and regions
	BEIS

¹⁶⁹ Where relevant, measures will be disaggregated by sub-groups including but not limited to gender, ethnicity, age, disability and other characteristics.

¹⁷⁰ It is important to note that the approach to emulating the success of levelling up may mean that metrics are replaced over time, as new research or better data is collected. The metrics are intended to provide a useful summary of key outcomes rather than be an exhaustive list. In addition, the levelling up metrics are not designed to be exhaustive and the Government will use a broader set of metrics to assess the progress of levelling up.

Percentage of businesses that are innovation active	UK, countries and regions
	BEIS
Inward and outward Foreign Direct Investment (FDI)	UK, countries and regions
	ONS
Usual method of travel to work by region of workplace	Great Britain, countries and regions * DfT
A course the coldinary in this to the desired to the course to the cours	
Average travel time in minutes to reach nearest large employment centre (500 + employees)	England, local authority *
	DfT
Percentage of non-frequent bus services running on time	England, local authority *
A	DfT
Average excess waiting time for frequent (bus) services (N)	England, local authority * DfT
Dublic transport trips as a proportion of total trips per year	
Public transport trips as a proportion of total trips per year	England, regions * DfT
Descentage of promises with gigabit capable broadhand	
Percentage of premises with gigabit-capable broadband	UK local authority OFCOM
Percentage of 4G (and 5G) coverage provided by at least one mobile network operator†	UK local authority
	OFCOM
Percentage of pupils meeting the expected standard in reading, writing and maths by end	England, local authority *
of primary school	DfE
Percentage of young people achieving GCSEs (and equivalent qualifications) in English and	England, local authority *
maths by age 19	DfE
Percentage of schools providers rated good or outstanding by Ofsted	England, local authority **
	DfE
Persistent absences for all pupils and disadvantaged and vulnerable cohorts of children	England, local authority *
•	DfE
Percentage of 5-year olds achieving 'expected level' on literacy, communication and maths	England, local authority *
early learning goals	DfE
19+ Further Education and Skills Achievements (qualifications) excluding community	England, local authority *
learning, Multiply and bootcamps (N)	DfE
Number of starts, and achievements, on apprenticeships per 1,000	UK, local authority
	DfE
	Stats Wales
	Scottish Government
Duranting of the annulating and 10 C4 with level 0 and if actions (Al)	NI Department for Economy
Proportion of the population aged 16 - 64 with level 3+ qualifications (N)	UK, local authorities ONS
19+ further education and skills participation (N)	England, local authority *
, , , , , , , , , , , , , , , , , , ,	DfE
Healthy Life Expectancy (HLE) (N)	UK, local areas (upper tier local authority in England, local authority in Wales, council areas in Scotland, local government district in Northern Ireland).
	ONS
Smoking prevalence in adults	Great Britain, local authority ‡
Strong providence in addite	ONS
Obesity prevalence – childhood and adult	UK, local authority *
	NHS England Scottish Government Public Health Wales NI Department for Health
Cancer diagnosis at stage 1 and 2	Great Britain, various geographical levels *
	NHS England Public Health Wales Public Health Scotland

Under 75 mortality rate from cardiovascular diseases considered preventable (per 100,000	England, local authority *
population)	DHSC
Average life satisfaction ratings (N)	UK, local authority
	ONS
Average feeling that things done in life are worthwhile ratings (N)	UK, local authority
	ONS
Average happiness ratings (N)	UK, local authority
	ONS
Average anxiety ratings (N)	UK, local authority
	ONS
Percentage of adults who are satisfied with their local area as a place to live (N) (E)	Great Britain, countries and regions *
	DCMS
Percentage of individuals who have engaged in civic participation in the last 12 months (E)	Great Britain, countries and regions *
	DCMS
Proportion of non-decent rented homes (N)	England, regions *
	DLUHC
Number of first-time buyers (N)	England, regions **
	DLUHC
Recent first time buyers (last 3 years)	England, London and rest of England *
	DLUHC
Net additions to the housing stock	England, local authority *
	DLUHC
Neighbourhood crime	England and Wales, Police Force Areas **
	ONS
Homicide	England and Wales, Police Force Areas *
	ONS
Hospital admissions for assault with a sharp object amongst under-25s	England, Police Force Areas *
	NHS Digital
Percent of the population living in an area covered by the highest level of devolution (N)	England, various geographical locations
	ONS

(N) Highlights those metrics not published at SR21 as part of the government's updated priority outcomes and metrics. (E) metrics are exploratory and may change.

^{*} statistics are only available for England or available for all/ some UK countries and regions but are not coherent.

^{**} metric is currently unavailable. Work will be undertaken by government departments to address these data gaps.

[†] Estimates for 5G are not available on a regular basis and will replace 4G once data is published frequently and at a lower geographical level.

[‡] statistics are available for the UK and at local authority level but only at the national level for Northern Ireland.