IFS–CIPFA Local Government Finance Model: user and technical guide

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Preface

The IFS–CIPFA Local Government Finance Model has been developed collaboratively by the Institute for Fiscal Studies (IFS), the Chartered Institute of Public Finance and Accountancy (CIPFA) and the District Councils' Network (DCN). IFS, CIPFA and DCN would like to thank those from local government (including from the Local Government Association and a range of councils) who participated in the evidence-gathering and testing phases of model development, whose insights have significantly improved the model's design and functionality. They would also like to thank the Economic and Social Research Council (ESRC) for funding the development of the model through the Local Acceleration Fund (grant reference: ES/W011670/1). Further maintenance and hosting of the model have been funded by the Economic and Social Research Council through Impact Acceleration Account (IAA) funding awarded to the Institute for Fiscal Studies: this continuing support is also gratefully acknowledged. In addition, the model development team thank colleagues at IFS, CIPFA and DCN who have supported the development and dissemination of the model.

The authors of this model guide in particular would like to thank colleagues for their feedback on earlier drafts and iterations. However, any errors or omissions in the information provided in this guide are the sole responsibility of the authors.

Disclaimer

IFS, CIPFA and DCN do NOT offer any warranty in relation to the operation of and results obtained from the IFS-CIPFA Local Government Finance Model. Users make use of the model at their own risk, and any decisions informed by use of the model are the responsibility of the council in question. Potential errors in the official data used, inherent uncertainty about the future, and the ability of councils to vary assumptions all mean that the results produced by the model are indicative and contingent on factors outside the control of IFS, CIPFA and DCN.

Contents

1. Introduction

A decade of austerity saw the amount councils were able to spend per resident on local non-education services fall by a quarter during the 2010s, after accounting for inflation. At the same time, long-term socio-economic and demographic changes, increases in wage and pension costs, and the impact of the COVID-19 pandemic are leading to rising service demands and costs. In addition, financial reforms mean that councils rely more on locally raised revenues, and are more financially exposed to changes in local spending needs and revenue-raising capacity. With further reforms planned in the coming few years, councils have a unique opportunity to influence how the finance system will affect them for years to come.

In this context, it is more vital than ever for councils to engage in medium- and long-term financial planning and scenario modelling. Such analysis is needed both for effective long-term decision-making by councils and to enable fuller engagement with and scrutiny of central government proposals for finance system reforms.

The Institute for Fiscal Studies (IFS) has been developing a model of the local government finance system and projections of councils' revenues and spending pressures for its own analysis of the funding outlook and funding reforms. However, discussions with local government suggested that a web-based version of this model that councils could access themselves would be a useful complement to the financial modelling tools already available. IFS, the Chartered Institute of Public Finance and Accountancy (CIPFA) and the District Councils' Network (DCN) have therefore partnered to make a version of this model freely available online. This online model ('The IFS–CIPFA Local Government Finance Model') is designed to be used by all types of English councils but may be particularly useful for district councils, which may have fewer resources for building or purchasing their own more bespoke models.

The design and functionality of the online model have been informed by engagement with and testing by local government finance officers and the finance team at the Local Government Association (LGA). In an initial evidence-gathering phase, a survey was sent to councils and, following this, a round table was held with a selection of those survey respondents who agreed to take part. The model was tested in two phases: first, initial testing by the model development team; and second, testing with a number of finance officers and the finance team at the LGA. The insights obtained from this process have significantly improved the model, and the development team is very grateful to all who took the time to engage with it. Since an initial version was launched, the team have continued to engage with users, and to update and improve the model. We welcome further feedback; it is still a ‘work in progress’ and can undoubtedly be improved further, and extended to provide additional functionality.

The rest of this guide proceeds as follows. Section 2 sets out the types of questions the model can help answer – and those questions it is not designed to address. Section 3 explains how to use the model, while Section 4 illustrates how it can be used using two worked examples. Section 5 provides answers to a list of frequently asked questions (FAQs) about the model. Finally, a full technical appendix describes in detail: the data (Appendix A); default assumptions on revenue trends, spending pressures, the funding system and economic variables (Appendix B); the calculations undertaken in the model (Appendix C); and the major updates made since the initial version of the model was launched (Appendix D).

2. What is the model for? And what is it not for?

This section explains the types of questions and issues the IFS–CIPFA Local Government Finance Model can help councils explore, and the questions it is not designed to address.

These uses and limitations reflect the data and modelling assumptions underlying the model (full details of which can be found in the technical appendix). In particular, the model makes use of publicly available data on spending and revenues from councils' revenue outturn and budget (RO and RA), national non-domestic rate (NNDR), and council tax levels (CTL) and a number of other sources, together with projections for population and forecasts for inflation and earnings. These data are necessarily less specific and detailed than what is available to councils from their own internal data, at least for the next few years.

On the other hand, the model incorporates options to vary the rules of the local government finance system. Currently these mostly relate to business rates retention, but more options will be added as the government publishes details about its proposals for funding reform. As we describe in Section 3, councils are also able to vary assumptions about future revenues and service demands and costs, as well as use their own baseline revenue and spending figures instead of the default published data.

2.1 Questions the model can help explore

With this in mind, we think there are two broad types of questions/issues the model can help councils explore:

Medium- to longer-term financial scenario planning. The model's focus on the medium- to longer-term drivers of the demand for and cost of providing local public services, and of revenues, together with the flexibility to easily vary assumptions means that it is particularly useful for medium- to longer-term scenario planning.

For example, the default assumptions for projecting adult social care services expenditure are based on Office for National Statistics (ONS) projections of population by age group and recent research on potential future trends in demand for social care services. The default assumptions for projecting children's social care services take account of ONS projections of changes in the child population and are informed by recent trends in the share of children that are 'looked after' and/or on Child Protection Plans. Projections of expenditure for all services take account of forecast inflation and earnings growth, with these cost drivers weighted differently for different services. Default council tax revenue projections take account of ONS projections of household numbers, and assume the same council tax referendum limits in future years as in 2023–24, while business rates revenue projections are based on detailed modelling of the business rates retention system.

All of these elements are uncertain: social care demand could rise faster or slower than projected; inflation may remain higher for longer than expected or fall back quickly if the economy shrinks significantly; the government may freeze council tax to ease the cost of living or allow bigger increases to address the impact of inflation on councils. However, the default assumptions are designed to provide reasonable central scenarios, and uncertainty can be accommodated by varying different assumptions separately or together.

Using the model, councils can therefore look at how their service spending and main sources of revenue could evolve over the period until the mid 2030s. Will revenues keep pace with the rising demand for and cost of service provision? If social care demand rises faster, how much bigger would council tax increases have to be, all other things equal, to avoid a funding gap? If the business rates tax base starts to shrink in future, how big an impact would that have given how the rates retention system works? More generally, if certain demands and cost drivers are a bit higher or lower, how different would the funding outlook be?

By bringing together the data and calculations needed to look at such questions in an online graphical interface, with downloadable charts and tables, together with the ability to export full data sets for further analysis, the IFS–CIPFA Local Government Finance Model should make these sorts of questions easier to explore.

The model also allows a council's revenue and spending projections to be compared with those of other similar councils (based on CIPFA's Nearest Neighbours model), allowing for robust comparative analysis.

Analysis of and engagement with local government finance reform. The 2010s saw significant changes to not just the level but also the *system* of local government funding. The ending of annual spending needs assessments, the introduction of the business rates retention system, and large cuts to grant funding mean that councils are both more reliant on locally raised revenues and more exposed to changes in local circumstances than previously. The 2020s will see further changes, including via the 'Fair Funding Review' (which is now not due to be implemented until 2025–26) and the resetting and potential reform of the business rates retention system.

Both the current system and proposed reforms are complex. However, existing rules and proposed changes have significant effects on the funding levels and risks faced by different councils – to the tune of many millions of pounds per council. It is therefore vital that councils understand the impacts of different reforms, so that they can both engage in the reform process and produce robust medium- to longer-term financial plans.

IFS's main reason for building a model of the local government finance system in the first place was to be able to simulate the impact of proposed and counterfactual reforms on different types of councils: those with more affluent or deprived populations, those with slower or faster growth in tax bases or in population. When developing the online version of the model, IFS, CIPFA and DCN felt it was important that it allow councils to do the same for their own specific area.

The online model thus helps councils to address questions such as 'What are the likely impacts of planned changes to the funding system on revenues?', 'Would changing certain elements of the reforms have a positive or negative effect on the funding outlook?' and 'How do the impacts of reforms compare with those on other similar councils, with which one may wish to coordinate responses to reform consultations?'.

Currently, the reform options that can be modelled are restricted to the business rates retention system. However, as more details emerge about the options the government will consult upon, we will add spending needs assessments, council tax resource equalisation, and transitional protections to the model.

2.2 Issues the model is not designed to address

The use of publicly available data and a focus on the medium- to longer-term drivers of spending and revenues mean that the model is not designed for use in councils' short-term budget setting or reserves forecasting processes.

This is because councils will almost certainly have internal data and knowledge that enable them to make better short-term forecasts themselves. For example: in-year data on service usage and spending will be informative about the next year or so at least; plans to cut back or enhance services will affect spending even if underlying spending *pressures* remain the same; and information on new planning applications and property completions will help predict local tax revenues. In addition, certain types of income (such as commercial and investment income) and expenditure (such as debt servicing costs) are difficult to forecast without very detailed information, such as on the life cycle of investments and on the profile of debt repayments.

The IFS–CIPFA Local Government Finance Model therefore cannot replace the bespoke analysis councils already undertake as part of their budget setting processes. However, based on feedback from councils as we designed and tested the model, it does allow councils to upload their own data and projections for these other types of revenue and expenditures. Councils can also overwrite the published service spending and main revenue data with their own figures – for example, if they are more up-to-date. These data remain private: the model does not store or transfer data that councils upload for use in projections.

This approach is a recognition of the inherent limitations of publicly available data for short-term budget setting and forecasting. But it also provides the flexibility for councils to add additional items and more specific short-term forecasts to the model's main projections.

3. How do I use the IFS–CIPFA LG Finance Model?

This section explains how to access and use the IFS–CIPFA Local Government Finance Model. The structure is as follows:

We begin with some important information on how the results of the model (including charts, tables and analysis conducted using downloadable data sets) should be interpreted and cited.

Next, we discuss how to access the model and the latest materials explaining how to use it.

We then explain how the model interface is structured – where to find results, and where to change assumptions and funding system options.

3.1 Using and citing model results

As described in Section 2, the IFS–CIPFA Local Government Finance Model is designed as a tool to help councils explore the medium- to longer-term outlook for service spending and their main revenue sources, and the impact of funding system reforms. It does this using publicly available official data collected from councils, and assumptions about changes in service demands and costs and revenue-raising capacity that are evidence-based, but subject to significant uncertainty. Councils are also able to vary virtually all of the assumptions included in the model and (privately) upload their own data for use in projections. This model design has two key implications.

First, IFS, CIPFA and DCN do not offer any warranty in relation to the operation of and results obtained from the model. Any decisions informed by use of the model are the responsibility of the user. While reasonable care has been taken in developing and maintaining the model, there are potential errors in the official data used, there is inherent uncertainty about the future, and users can vary default assumptions. Therefore, the results produced by the model are indicative and contingent on factors outside the control of IFS, CIPFA and DCN.

However, we are always looking to improve the model and we value user feedback, including on any errors identified, the default assumptions, and suggested additional features for future updates.

Second, the results of the model should not be cited as being IFS or CIPFA (or DCN) analysis. The model relies on data and evidence from a range of sources, and allows councils to select their own assumptions for service demands and costs, revenues and financial reform. We therefore suggest describing results from the model as:

'*[Council name / Department or team name / "Own"] analysis using the IFS–CIPFA Local Government Finance Model*'

This makes clear that while the model has been used to produce the analysis, the assumptions and data used are the choices of the user rather than of IFS or CIPFA (or DCN).

3.2 Accessing the model

The IFS–CIPFA Local Government Finance Model is a web-based model, built using the R programming language. It requires no downloading and can only be accessed when online at either of the following URLs:

www.ifs.org.uk/local-finance-model

www.cipfa.org/local-finance-model

These web pages also include links to the latest user guide (which will be updated as the model is updated and as feedback is received), as well as explainer videos, and information on any upcoming webinars or events where you can find out more about the model.

You do not need to register or log in to use the model, and there is no central database that stores information on the councils selected, the assumptions chosen and the data downloaded by the model. However, as discussed in Section 3.4, you can save and download the assumptions you have made for later use by you. If you have not done so, when you reload the model it will revert to default assumptions and settings and you will have to change assumptions and settings manually.

Please note that after several minutes of inactivity, you will automatically be disconnected from the model server, and the model will need to be reloaded, so it is worthwhile regularly saving your assumptions for later use if you have made significant changes from the defaults.

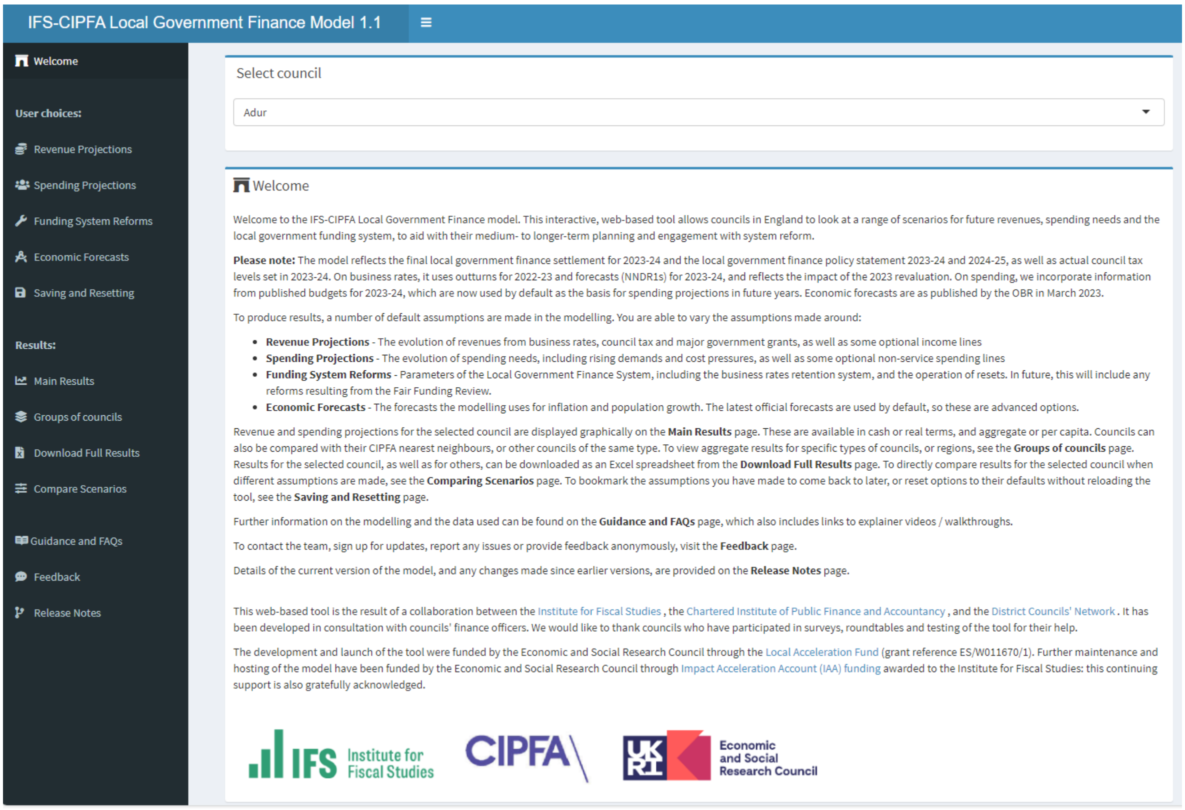
3.3 The structure of the model

When you visit the model web page, after scrolling past links to explainer materials and events, you will see the model's 'Welcome' page. This is shown in Figure 3.1.

This serves two purposes:

- to select a council;
- to provide basic information on what the model does, which assumptions can be changed, where to view the results, and where to find further information on how to use the model and how to provide feedback.

Figure 3.1. The model welcome screen



The main menu bar

The rest of the model can be accessed via the main menu bar on the left-hand side of the screen. The different model pages are grouped together based on their purpose.

The items listed under 'User choices' are where you choose assumptions underlying revenue and spending projections, including those related to the general economic environment (such as inflation and earnings growth), and reform of the local government funding system. You can also save and reload assumptions, and restore default assumptions.

The items listed under ‘Results’ are where you access pages relating to the results of the model: viewing and downloading them, and comparing different scenarios.

The final three pages provide answers to some frequently asked question, information on how to provide user feedback on the model, and notes about any changes made to the model.

You will need to use the main menu bar often as you switch between pages that allow you to set different assumptions and view and download modelling results.

3.4 Setting modelling assumptions

The model includes predefined default assumptions. Users can accept these and then continue directly to viewing and downloading the results (see Section 3.5). Full information on these default assumptions can be found in the technical appendix to this guide.

However, you may wish to use your own assumptions and/or test the sensitivity of modelling results to different assumptions as part of your scenario planning.

Revenue Projections page

The assumptions underlying revenue projections can be changed from the tabs accessible via the ‘Revenue Projections’ menu button.

There are six different tabs accessible from the secondary menu (along the top of the model interface), each covering a separate revenue stream.

‘Council tax revenues’ tab

This tab contains three main sets of options/assumptions:

1. Options related to changes in council tax levels/rates. These can be varied separately for councils with and without social care responsibilities. The defaults assume council tax levels in future years increase every year in line with the 2023–24 referendum limits. There is an option to assume that the referendum limits change in some future year.

2. Options related to the council tax base. There are several built-in options to choose from: a simple assumed annual growth rate; growth based on past national or local trends; or growth based on forecast growth in household numbers by local areas.

If you base your projections on past growth in the tax base, we recommend stripping out the effect of changes in the cost of localised council tax support schemes. The period from 2013 to 2019 saw these costs fall significantly as councils made their systems less generous, and the number of unemployed and low-income people eligible for the schemes fell. We do not think it appropriate to build further cuts to the generosity of these schemes – a policy choice – into our default scenarios, nor do we think underlying eligibility for support will continue to decline in the same way. But you can always untick the box if you want to assume these past policy and economic trends continue.

Whatever assumptions you use for the tax base, you need to decide what fraction of the notional tax base is actually collected. The default assumption is that forecast collection rates for 2023–24 persist in the future, but you can instead assume a fixed percentage.

The option of overwriting projections of the council tax base (measured in Band D equivalent properties) using your own specific figures is available. To do this you download, edit and then re-upload a spreadsheet which has projections of the number of Band D properties by council by year (there are buttons to download and re-upload the spreadsheet). You must look for your own council in the spreadsheet and make sure not to delete any rows or columns or rename the column headings.

Key point: Overwriting assumptions-based projections with your own projections

There are several places within the model where you can overwrite the model's assumption-based projections. These include the council tax base, business rates tax base, spending baselines and spending projections. To do this, you first download the data that need to be edited. When doing this, you MUST make sure not to change the format of the spreadsheet. Then simply re-upload the edited and saved spreadsheet.

3. Options related to parish precepts. By default, these are not included either as a revenue or spending item. However, you can count them as both if you wish by ticking this box. This also requires you to choose how parish precepts increase in future years, and this defaults to 6.5%, the average increase between 2022–23 and 2023–24.

'Business rates revenues' tab

This starts off with the same broad structure as the council tax, with the first set of options relating to the business rates tax rate (the 'multiplier') and the second set relating to the tax base. The complexity of business rates means there are some additional considerations though.

First, by law, increases in the multiplier are capped at inflation. We assume by default that the multiplier rises each year in line with forecast CPI inflation in the year to the previous

September, and that the multiplier never decreases year-on-year. If the fixed percentage you choose is above RPI inflation, we cap the increase at RPI inflation.

Second, councils have in recent years been compensated for increases in the multiplier below RPI inflation by section 31 grant and adjustments to their tariff and top-ups, although in 2023–24 they were compensated for increases below CPI inflation. Our default assumption is that compensation to CPI continues in future, but you could choose to instead compensate for increases below RPI, or to end compensation for future underindexation.

Third, because of the complexity of the rates retention system, rather than use your own figures for the business rates tax base *level* when overwriting the model's projections, you download, edit and re-upload spreadsheets of year-on-year tax base *growth rates*.

After setting tax rate and base assumptions, there are options related to specific features of the business rates retention system:

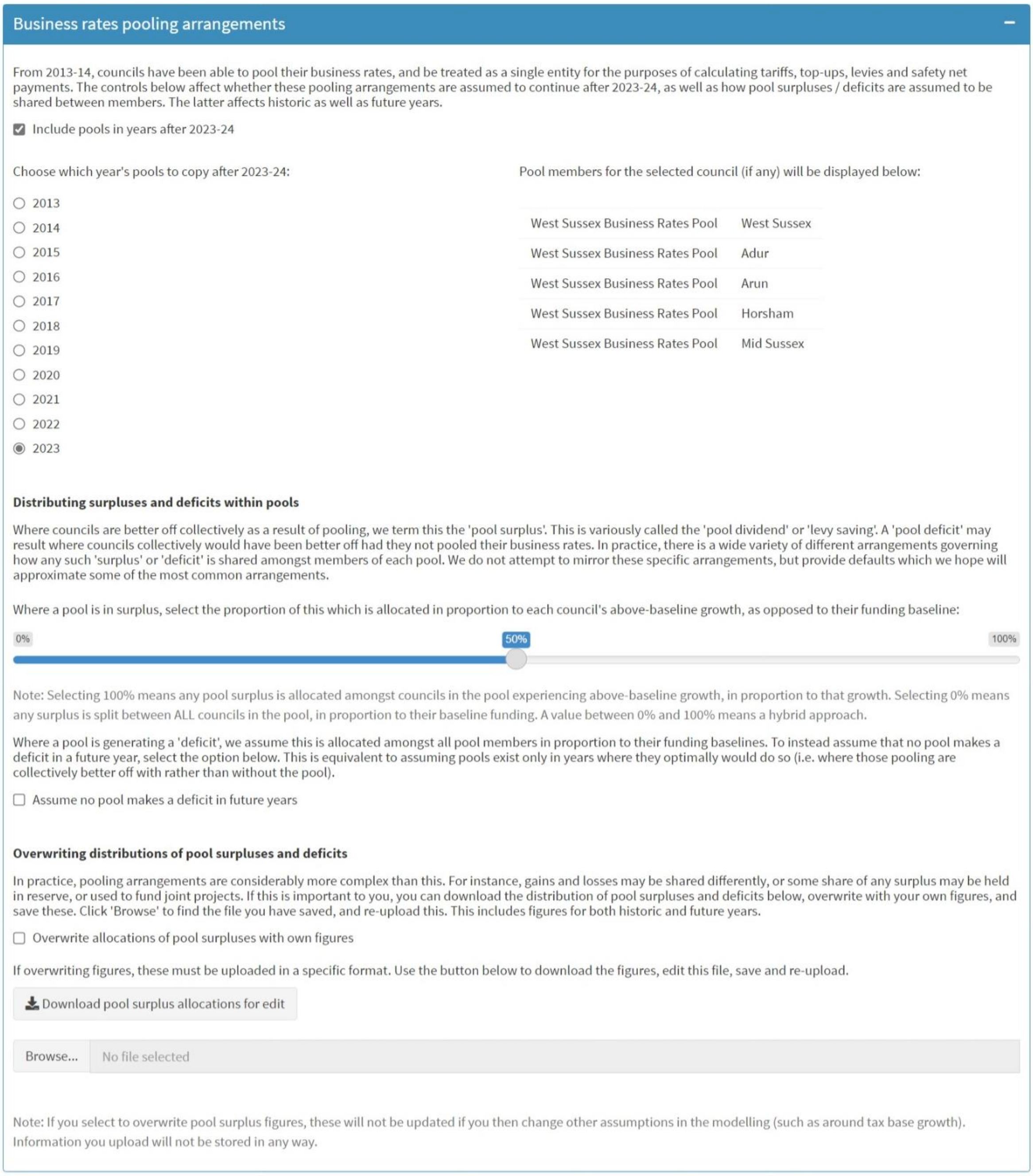
Pilots of increased retention. A number of councils are currently piloting rates of retention that differ from the standard rates across the rest of England. Here you can choose which year's pilots to include in projections, if any: the default is the latest year (2023–24) but it is also possible to copy arrangements from earlier years.

Pooling arrangements. Councils are able to pool their business rates revenues, in order to spread risks but, importantly, also to reduce exposure to 'levies' that skim off a portion of growth in areas with high business rates revenues. This means most pools generate net surpluses – by pooling together, member councils receive more in total than if they did not pool.

We do not observe how these pool surpluses are shared out between councils. Instead we provide one built-in option where surpluses are shared partly in relation to baseline funding levels and partly in relation to their business rates revenue growth: users can choose the weights given to each of these. Alternatively, you can choose to overwrite the allocations of pools surpluses with your own figures.

You can choose whether to assume pooling arrangements continue in future years and, if so, which year's arrangements to copy.

Figure 3.2. Selecting business rates pooling arrangements for future years



Distributing the levy account surplus. Under the current business rates retention system, levy payments paid by councils enjoying above-baseline growth are intended to fund safety net payments, with any remaining surplus being returned to the sector. You can choose whether to include payments from the levy account in future years.

'Grants income' tab

This tab allows you to change assumptions about the range and level of grant funding councils will receive in future.

As we explain in the technical appendix, we do not include all grants received by councils – only those within core spending power plus the public health grant. However, there is the option of adding an additional grant and overwriting figures if you wish to include additional grants in your analysis.

The controls for a number of grants include sliders allowing you to choose dates where you assume those grants are switched off. The default and alternative assumptions built into the model vary by grant, based on recent historical practice. For instance, the default for the revenue support grant is indexation in line with CPI inflation. On the other hand, the default for rural services delivery grant is a cash freeze.

By default, allocations between councils generally follow the approaches used in the final local government finance settlement, 2023–24. The default assumptions on growth in total income from grants are consistent with the Autumn Statement 2022 and the local government finance policy statement for 2024–25. The default options are not intended as predictions, but as sensible central scenarios around which users may wish to vary assumptions and look at the sensitivity of results.

The allocation of a number of grants is particularly complex and/or uncertain, and hence here the options available are more complex and flexible.

Social care grants can be allocated in future years in line with historical distributions or existing adult social care (ASC) relative needs formulas (RNFs), or can be rolled over, with any increases allocated in line with RNFs. A further option allows for the full value of grants in future years to be allocated in line with RNFs, accounting for the amounts each council can raise through the ASC council tax precept. By default, councils are assumed to retain the repurposed funding from delayed social care reforms to support existing services, but you can select to remove this funding from 2025–26 onwards.

Improved better care fund has similar options, as well as the possibility of a distribution which only partially accounts for the amounts each council can raise through the ASC council tax precept.

Adult Social Care Market sustainability funding is now included by default, and assumed to continue in future years. Note this funding will come with additional reporting requirements on councils.

New homes bonus can be rolled over in future years or set to end in 2023–24. If the grant is assumed to end, you can select whether and how to redistribute the funding between councils.

The Services Grant provided in 2023–24 can be continued into future years or can be ended. Before it is ended, the funding provided can be distributed between councils according to population or assessed spending needs.

The final set of grant funding options allow you to:

- **create your own grant** and determine its total value, how it is allocated between councils, and which years it is payable for;
- **roll over the funding gauarantee** provided in 2023–24, or assume it is replaced with an alternative grant that operates like a funding floor, guaranteeing each council a minimum increase (or maximum decrease) in their core spending power each year;
- **overwrite the assumptions-based grant projections** figures with your own figures.

'COVID-19 support' tab

The model separates out temporary COVID-19 funding (from additional grants and other compensation schemes, such as the sales, fees and charges compensation scheme), from other central government funding. This tab allows you to select which sources of funding to include. The defaults have been chosen carefully to best represent the amount of additional funding councils received in both 2020–21 and 2021–22. Note that we deliberately chose to exclude Council Tax Hardship Fund funding for 2020–21 because when councils set their council tax requirements at the beginning of that year, it was prior to the impact of the pandemic being known.

Figures are based on published data which we can source on a consistent basis across councils. This means our lists of the types of financial support councils received are not comprehensive. For instance, they do not include funding received from NHS clinical commissioning groups, or sales, fees and charges compensation payments relating to the period after November 2020, as details of these payments are not publicly available. There is the option of overwriting figures if you wish to, including for other years. This may be especially relevant if you do not wish to recognise some accrued COVID-19 grants until 2022–23.

'Commercial and investment activity' tab

By default, the model does not include commercial or investment income in its revenue projections. However, this tab allows you to add in this income for past years using income reported in councils' financial returns. As discussed in Section 2, we do not feel able to project forward this income for the current and future years using publicly available data. However, you can upload your own figures for historical years, and projections for 2024–25 and beyond, if you wish to.

‘Collection Fund’ tab

We generally assume in future years that there will be no deficits or surpluses on the Collection Fund. However, some surpluses and deficits on the Collection Fund are known about, and you may have figures you use within your existing medium-term financial plans. This tab allows you to add in surpluses (deficits) on the Collection Fund to revenues in each financial year for the selected councils. If providing your own figures, these will be added to the measure of total revenues.

Note that in relation to business rates, we use final revenue figures up to 2022–23, so that there are no surpluses or deficits to account for. For 2023–24, we rely on information from NNDR1s. We do not currently account for any deficits/surpluses on the Collection Fund relating to council tax by default, even for historical years.

Spending Projections page

The assumptions underlying spending projections can be changed from the tabs accessible via the ‘Spending Projections’ menu button.

There are four different tabs accessible from the secondary menu (along the top of the model interface). The first controls general assumptions for all spending projections, the second assumptions for specific services, while the third allows you to add in additional spending items. The fourth tab explains how the model does not specifically account for COVID-related spending pressures: they are instead incorporated by using outturns data for 2020–21 and 2021–22, and budget data for 2022–23 and 2023–24, which will take account of actual and forecast COVID-19 pressures, respectively.

‘General assumptions’ tab

This tab is where you choose which baseline data to use for the spending projections.

Choosing a baseline year of data. The model allows you to base your spending projections on outturns data from 2019–20, 2020–21 or 2021–22, or budget data from 2022–23 or 2023–24.

If you select to project forward from the budgets that councils submitted in their RA forms for 2022–23 or 2023–24, you must project forward net expenditure.

If you select to project forward from outturns data, you also have the option (on the ‘Service-specific assumptions’ tab) of choosing to project forward different elements of gross expenditure separately: employee costs, running costs, and income from sales, fees and charges. If you provide your own baseline data for later years, you can also project forwards different elements separately.

Overwriting baseline spending data and projections. You can choose to overwrite the baseline spending figures on which projections are based. You can also decide to overwrite the resulting projections themselves with your own projections if you feel they are better.

‘Service-specific assumptions’ tab

This tab is where you set assumptions for projecting forward each specific service area. Services are split out according to the RA/RO classifications, with different evidence-based default assumptions for each service area. Full information on our approach to projecting forward spending and our chosen defaults is provided in the technical appendix. At a high level though, we see spending as being driven by changes in demand (e.g. the numbers of users) and changes in unit costs (e.g. the cost per user). Demand is driven by factors such as growth in relevant population groups, while unit costs are driven by factors such as inflation and wage growth.

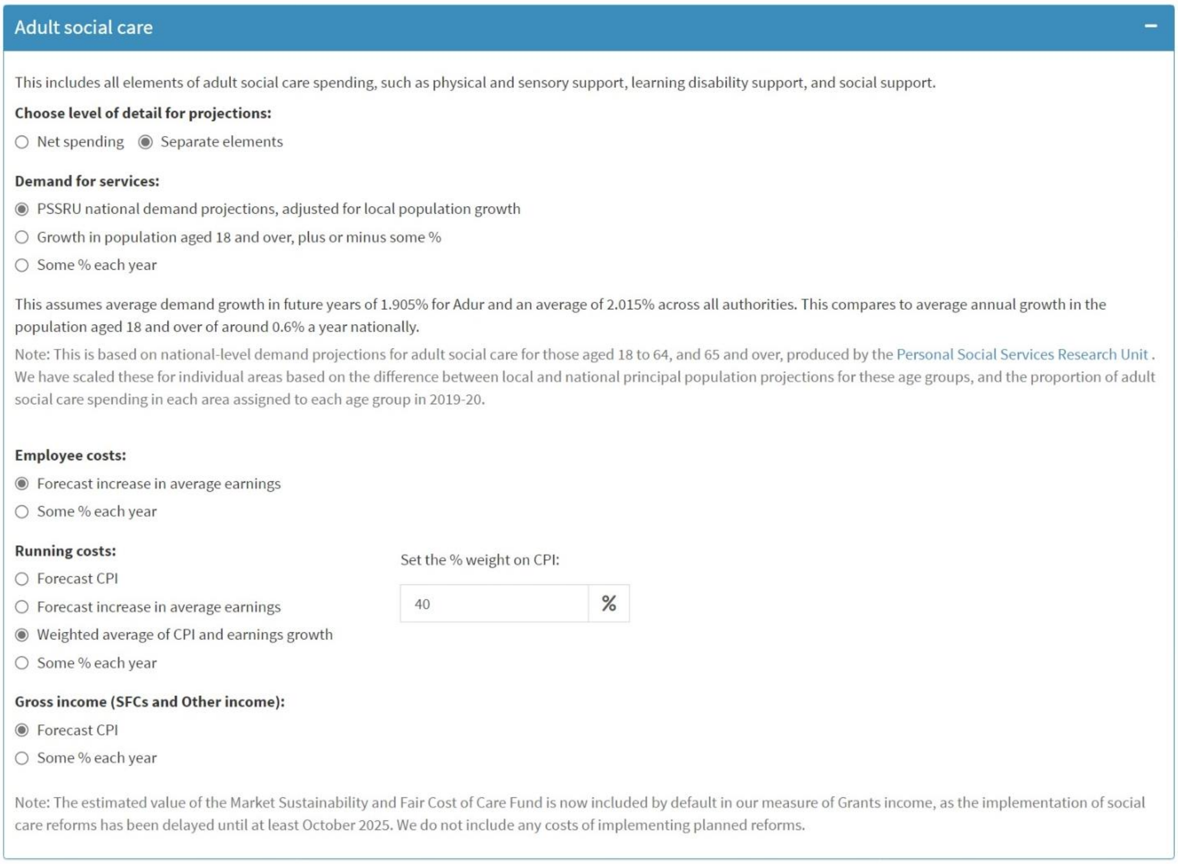
Each service area has a default and several built-in alternative options – although remember you can overwrite the projections with your own on the ‘General assumptions’ tab.

The first thing you need to do for each service area is decide whether to project forward net spending or the separate elements of spending separately. If you do the former, the model assumes that changes in demand affect each element of net spending in the same way.

For most service areas, we assume by default that demand changes in line with forecast growth in the number of households, or the population, although we assume demand for adult and children’s social care services increases more quickly. You can set different assumptions on demand growth, which may be faster if you think there are particular demand drivers in your area, or slower to reflect the impact of policies in place to manage demand.

However, as illustrated for adult social care services in Figure 3.3, cost factors can affect different elements of gross expenditure and income from sales, fees and charges differently.

Figure 3.3. Assumptions for projecting adult social care demands and costs



By default, employee costs are assumed to increase in line with demand plus average earnings, and running costs by a weighted average of demand plus average earnings and consumer price inflation. The default weights differ by service area based on our analysis of councils' subjective analysis returns, which make clear that a large part of running costs consist of labour services purchased from external suppliers. Sales, fees and charges income is assumed to increase in line with demand plus consumer price inflation by default.

Implicitly, these defaults assume two things:

- first, that price and wage inflation for the inputs used in these services matches whole-economy price and wage inflation;
- second, that productivity in delivering these services is constant, so that price and wage inflation translates one-to-one into increases in the costs of servicing each unit of demand.

Both of these assumptions are uncertain. If you think productivity will grow, you can set the change in employee and running costs to be lower than average earnings growth and inflation – because each employee and unit of input can service more demand as time goes by. Similarly, if you think wage growth or inflation for council services will be higher or lower than that in the whole economy, you can choose your own higher or lower figures.

Key point: Gross income is not assumed to rise by forecast inflation in 2022-23

When projecting elements of spending separately, gross income from sales, fees and charges and other sources is assumed by default to increase with demand and forecast CPI inflation. However, if projecting forwards with 2022–23 or earlier as the baseline year, using the most recent forecasts for CPI inflation in 2022–23 (10.1%) would imply very large increases in gross income. Instead, we use the forecast for CPI inflation as of the OBR's October 2021 Economic and Fiscal Outlook (3.7%), which better matches councils' expectations of inflation when they were setting fee levels for 2022–23.

'Non-service spending' tab

The main focus of our spending projections is service expenditure, including spending on levies to combined transport and waste authorities where these exist. This is because such spending can reasonably be projected on the basis of demand and cost drivers.

However, other elements of spending can be significant for some authorities, including debt servicing costs. This tab allows you to add these figures for repayment of principal and debt interest for past years based on data in RO and RA forms, and to edit these and upload your own figures for future years, in the same way as for commercial and investment income.

Funding System Reforms page

We envisage modelling the impact of proposed and alternative finance system reforms as being one of the main things councils use the model for over the next few years. Currently, very few details of what reforms the government will make are available, which has made it difficult to build this section of the model. We therefore plan to add the ability to simulate the medium- to longer-run impact of proposed reforms as information about them becomes available, as well as the ability to simulate variants of these reforms.

Currently, the model provides options for simulating potential reforms to the business rates retention system. The first set of options relate to resets of the business rates retention system, and the second other changes to the system.

'Business rates resets' tab

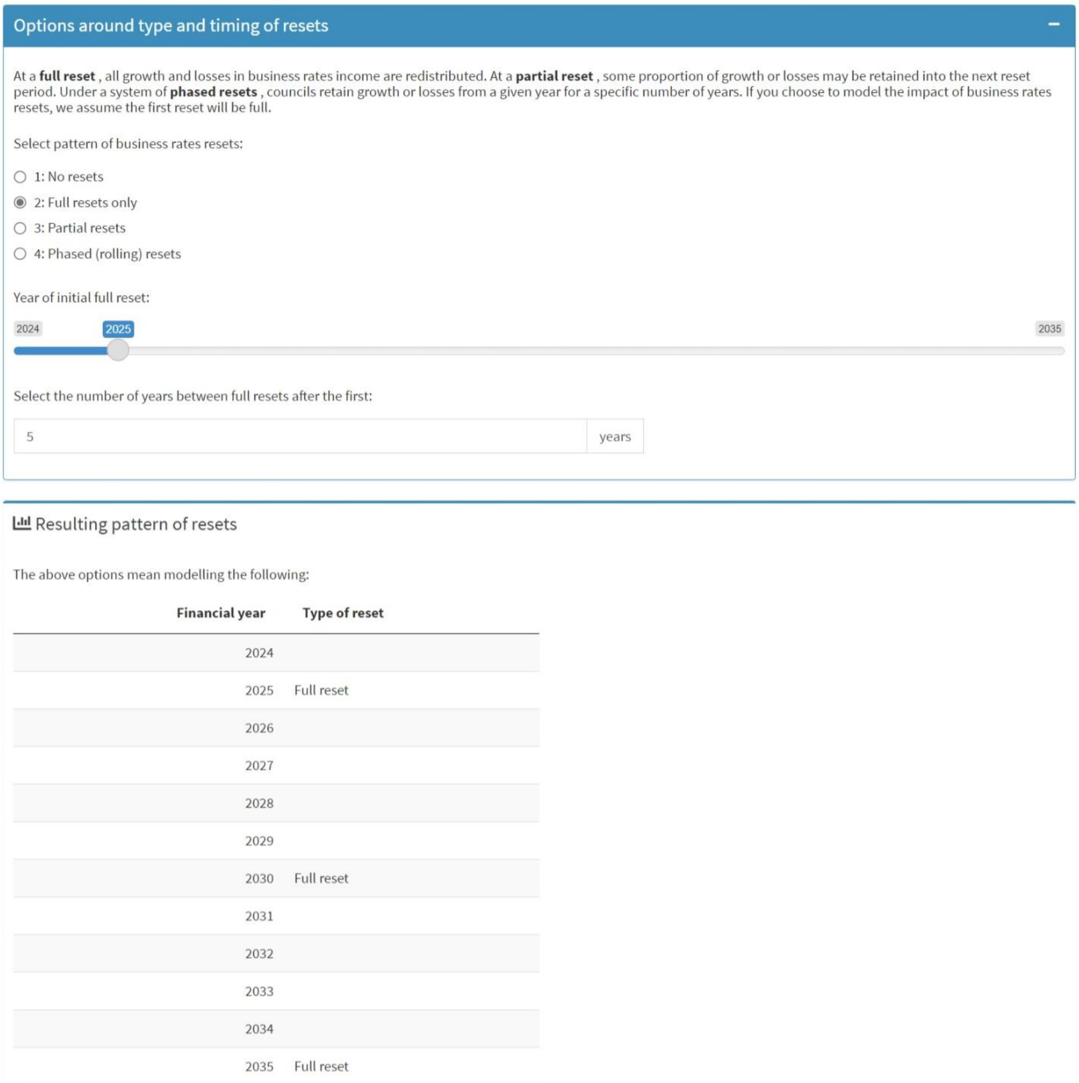
The estimates of councils' business rates revenues (business rates baselines) and funding requirements (baseline funding levels) on which the redistribution of business rates via tariffs and top-ups is based were initially set in 2013–14, when the scheme was set up. At some stage, these baselines will be reset so that subsequent growth (or declines) in business rates revenues are distributed around the country in line with updated estimates of funding requirements.

Options on this tab allow you to model such business rates retention system resets. There are four different options to choose from:

- **No resets.** Under this option, the system is never reset and councils retain their own business rates growth (or bear their own business rates losses) indefinitely.
- **Full resets only.** A full reset is where all growth and losses up to a given year are fully redistributed across the country. The government has indicated that the first reset will be a full reset but that subsequent resets may not be.
- **Partial resets.** Subsequent partial resets would redistribute only a percentage (e.g. 50%) of the growth and losses after the initial full reset.
- **Phased (rolling) resets.** Phased or rolling resets allow councils to retain the growth in any given year for a fixed number of years, unlike full or partial resets where growth is retained up to a fixed date. In this way, a phased reset smooths the impact of resetting the system and provides consistent financial incentives for growth over time (in contrast, full and partial resets provide stronger incentives just after and weaker incentives just before a reset).

We do not yet have enough information to incorporate the potential impact of revised funding needs assessments. Instead, we model resets as redistributing growth in proportion to existing shares of baseline funding levels.

Figure 3.4. Business rates resets options



If you decide to implement resets of the business rates retention system, you must choose: a year for the initial reset; the number of years between subsequent resets; and if modelling partial resets, the percentages of growth and losses that are redistributed.

Key point: The model DOES NOT currently include transitional protections

Currently, the model does not include any transitional protections for councils seeing significant reductions in funding as a result of resetting the business rates retention system. We will add options relating to transitional protection as the government publishes further information on proposed business rates retention reforms.

‘Business rates system’ tab

To model further reforms to the business rates retention system, go to the ‘Business rates system’ tab, then tick to model business rate retention reform, and select the year when the reforms take effect.

Changes to the overall rate of retention. Note that by default these are applied proportionally to existing tier shares (so, for example, the tier share for shire districts would increase from 40% to 60% and counties from 10% to 15% under a 75% retention system). However, you have the option of uploading your own specific tier shares for different types of councils.

Changes to safety net and levy arrangements. The current business rates retention provides a safety net below which retained rates revenue cannot fall, funded by a levy on the revenue growth of councils with high revenues. You can change the threshold below which the safety net kicks in, or change to a partial compensation system (which reduces but does not eliminate losses below the chosen safety net threshold). You can also choose whether to use the current approach to calculating levies (which redistributes part of all growth in high-revenue areas) or the government’s proposals for a new approach (which redistributes all the growth in high-revenue areas, but only when it exceeds a certain threshold).

‘Fair Funding Review’ tab

Once more information is available about the government's plans, this tab will be updated to include options relating to changes to how funding needs and revenue-raising capacity are assessed and accounted for in the local government funding system. This may also include the impact of potential transitional protection arrangements.

Economic Forecasts page

Projections of revenues and especially spending rely on forecasts and projections for economic and demographic variables – namely inflation, earnings growth, and population and household numbers growth.

‘Inflation and earnings growth’ tab

The model uses forecasts of consumer price inflation (CPI), retail price inflation (RPI) and whole economy inflation (the GDP deflator) in a number of places, including uprating the business rates multiplier and as a driver of service spending. We use the latest forecasts and longer-term projections from the Office for Budget Responsibility (OBR) as our defaults. Alternatively, you have the option of assuming inflation will be higher or lower by a fixed percentage each year, or overwriting the forecasts with your own specific figures for each year.

Labour costs are a significant proportion of councils' costs and by default we assume these costs increase in line with service demand and the OBR's forecasts for average earnings (3% for the years after the end of the OBR's forecast horizon). As with inflation, you can overwrite these figures with your own assumptions about how your employee costs will evolve over time.

'Population and household numbers' tab

Projected population and household numbers growth is taken account of in the model's default projections of spending and the council tax base. The Office for National Statistics (ONS) produces different projections based on different assumptions for migration, fertility and longevity. The model uses the 'principal' projections by default, but you can change this if you wish.

Saving and Resetting page

We hope you will use this model again and again as part of your medium- to longer-term scenario planning and engagement with funding system reforms. If you do, you are likely to want to look at the same or similar scenarios the next time you use the model.

To make this easier, the model allows you to create a bespoke URL which will set the model up with the assumptions currently in place. You will need to store this URL yourself and then, rather than access the model via its standard URL, use this bespoke URL instead. Please note that the bespoke URLs may not work with older browsers such as Internet Explorer. If this is a problem, try the link in a different browser.

The bespoke URL saves current assumptions only. It does not save additional scenarios being compared on the 'Compare Scenarios' page (see Section 3.5) or data that you have uploaded yourself.

Key point: Saving settings does not save uploaded data

While you can save the assumptions chosen within the model, this does not include any data you have uploaded from Excel, or any figures you have input on the 'Collection Fund' tab. This is because the model's servers do not store the data you upload.

You must therefore remember to re-upload the data. We recommend naming and saving the uploaded data on your own computer in such a way as to make it easy to find later.

This page also includes options to restore revenue, spending, funding system and economic forecast assumptions to their defaults.

3.5 Viewing and downloading results

The next set of buttons on the main menu take you to pages that display the results of the selected modelling assumptions.

Main Results page

This page is where projections of revenues and spending are displayed in charts, and where these graphs and the figures underlying them can be downloaded.

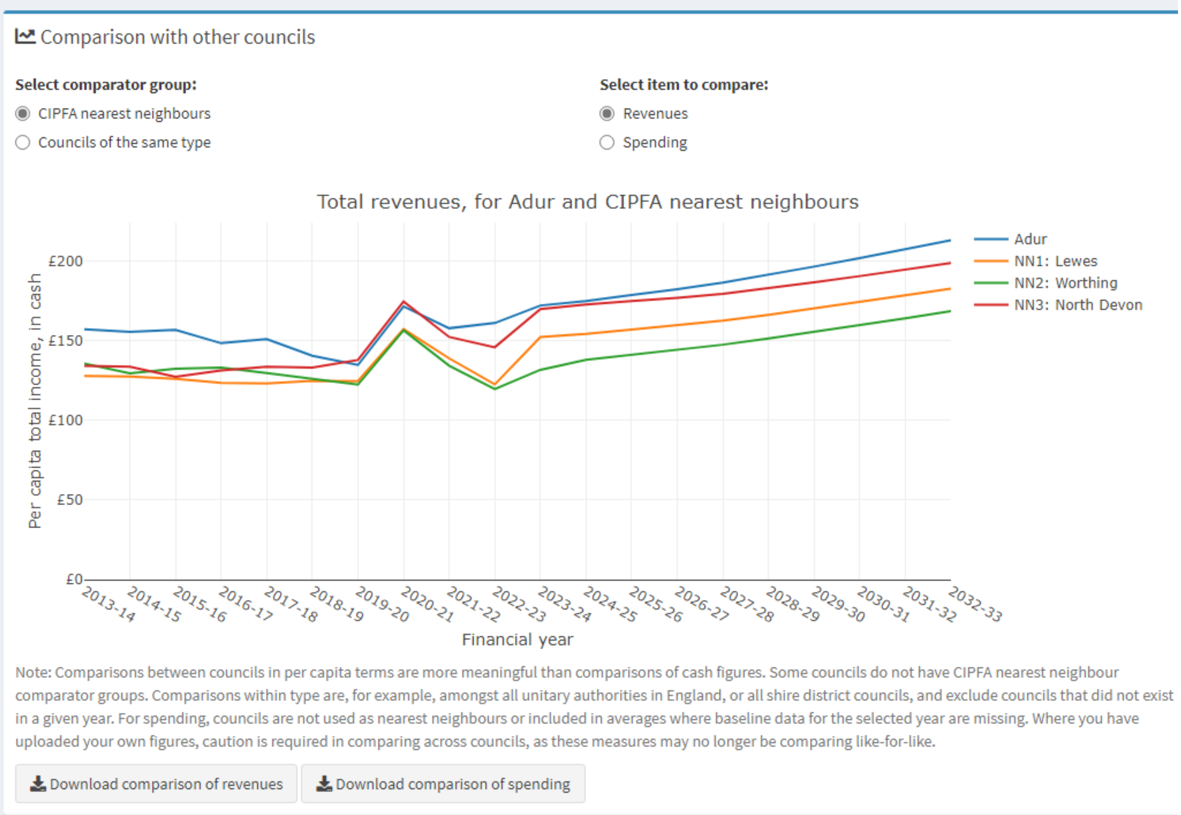
Before viewing results, you must decide how you wish them to be displayed: on an aggregate, per capita or per household basis; and in cash or real (inflation-adjusted) terms. The most appropriate option will depend on the issues you are considering. For example, if you want to understand how your council's main revenue sources could evolve over time, you may want to choose the aggregate figures and look at both the cash and real-terms projections. On the other hand, if you wish to compare your council with other councils (see below), we recommend selecting the per capita figures so that comparisons are not made difficult by differences in population size.

The page has four charts:

- **Revenues chart.** This shows revenues broken down by major source for historical years (based on actual figures) and future years (based on projections).
- **Spending chart.** This shows spending broken down by service area for historical and future years.
- **Comparison of revenues with spending chart.** This compares revenues and service spending for historical and future years. Note that if modelled revenues are less than modelled spending, that does not necessarily mean a council will face a budget deficit: other non-modelled revenue sources (such as grants outside core spending power, and commercial and investment income) may cover the gap. Conversely, if modelled revenues are higher than modelled spending, that does not necessarily mean a council has sufficient funding: other non-modelled spending (such as debt servicing costs) could push it into a deficit. This chart is instead designed to make it easier to see how councils' main sources of revenues could compare with their main service spending items, and how the trends in the two compare over time. However, remember that you can choose to upload your own projections for other revenue sources and spending items in the revenue/spending projections tabs – if you do, these will also be incorporated in this and the other results charts.

- **Comparison with other councils chart.** This chart allows you to compare modelled revenues and spending with other councils – either your CIPFA statistical ‘nearest neighbours’ (the councils most like you on a range of socio-economic indicators), or the minimum, average and maximum for councils of your type.

Figure 3.5. Comparing revenues with CIPFA’s ‘nearest neighbours’ councils



Note: The screenshot above is illustrative only. The figures are not IFS, CIPFA or DCN projections for revenues for the councils featured.

Chart images and data can be downloaded for each of the charts.

To download an image of a chart, hover over the chart and click the small camera icon that appears at the top of the chart. Other icons will also appear allowing you to zoom in and zoom out, select certain parts of the chart, etc.

To download the data underlying a chart, click the button underneath.

Groups of councils page

This page allows you too look at results for groups of councils – such as all councils of a specific type, all councils in a given region, or all councils in England. It also allows you to group councils by quintile of local area deprivation, as measured by average score in IMD2019.

This page shows charts (breakdowns of revenues and spending, and a comparison of revenues with spending) for the selected group of councils. The figures underlying these charts can be downloaded for this and other grouping, allowing comparisons across types and regions.

Note that when aggregating by type, this treats councils in historic years as if they always were of the same type as their successor council as of 2023–24. This means a consistent group of areas are being compared over time, even where areas have been subject to local authority reorganisation.

Key point: Results have been imputed for some councils in historic years

To allow for consistent comparisons over time, missing data is imputed outside of the model for a small number of councils where budget or outturn data is missing for specific years. This affects: Isles of Scilly in 2016–17; Bromsgrove and Redditch in 2020–21; Eden in 2021–22; eight councils in 2022–23 (Amber Valley; Nuneaton and Bedworth; Preston; Slough; South Lakeland; Southwark; Tamworth; and Warwick); and twelve councils in 2023–24 (Chesterfield; Cumberland; Hillingdon; North West Leicestershire; North Yorkshire; Pendle; Slough; South Holland; South Oxfordshire; Vale of White Horse; Westmorland and Furness; and Woking). A different approach is taken for each of these years, with details available upon request.

Download Full Results page

This page allows you to download full data sets for further analysis. You can select which revenue sources and spending items you wish to download the data for, which years you wish to download the data for, and which councils you wish to download the data for. A preview of your download can be seen at the bottom of the page.

You can also choose to include a separate sheet in the download which details the modelling assumptions the projections are based on – we recommend doing this.

Finally, by default, the outputted spreadsheet has a separate line for each council and each selected revenue source and spending item. This works best when you are downloading results for lots of revenue sources and spending items. However, if you want to download just the summary measures of revenue and spending, it is recommended to tick the box to ‘Show all variables for each council as a single row’. It is also recommended to use this option if you plan to conduct further analysis of the downloaded data set in a statistical software package such as Stata, where having figures for a council in a single row of data will make programming your analysis simpler.

Compare Scenarios page

This page allows you to compare how revenues and spending will evolve under up to four different scenarios (three saved, and the latest current one), based on different assumptions, for the same council.

To do this, you must save the assumptions used in a given scenario, before amending the assumptions for the next scenario. Name the scenario and then click 'Save current'. Press 'Clear saved' to remove a previously saved scenario if necessary.

Again, you can choose to display results in aggregate, per capita or per household terms, and in cash or real terms, and download chart images and underlying data. The downloads can include a separate sheet with the assumptions made in each saved scenario.

Key point: Saving and comparing scenarios

If you wish to compare scenarios, remember to 'Save current' scenario before going back and editing assumptions for the next scenario.

4. Worked examples using the model

We now turn to our two worked examples, designed to show how the model can be used to answer particular kinds of questions.

It is important to note up front that these examples have been designed to illustrate the workings and capabilities of the model only; they do not reflect the views of IFS, CIPFA or DCN on the outlook for funding nor the impact of funding reform on the councils used in the examples. The scenarios modelled use publicly available data, and default and variant assumptions designed to show how the model can facilitate scenario planning and analysis of funding reforms, and are not intended as a detailed study of the circumstances of the example councils used. The example councils chosen were selected to ensure there was diversity in type and geography – one is a northern unitary authority and the other a southern shire district – but are otherwise randomly chosen.

4.1 Projecting Stockton-on-Tees's revenues and spending under different assumptions

In this example, we will use the model to analyse how revenues and spending would evolve under a number of different scenarios for Stockton-on-Tees council. These are illustrative only and do not represent the views of IFS, CIPFA or DCN on how revenues and spending will actually evolve for this council.

Under Scenario A, default assumptions for revenues are used, except that council tax referendum limits are assumed to be lower from 2025–26 onwards, and the business rates tax base is assumed to grow by 0.5% a year. For spending, default assumptions are used.

Under Scenario B, in addition to these assumptions, we assume that demand for children's social care services grows by 2% per child per year rather than 1%.

Under Scenario C, in addition to these assumptions, we assume that public health and social care grants grow by 4% per year, that public health demand grows 1.5 percentage points faster than population growth, and that earnings grow by 4% per year after 2026.

In order to compare the evolution of Stockton-on-Tees council's main revenue sources and service spending under these scenarios, we will download the 'Comparison of revenues with spending' charts and underlying data for each of these scenarios. We will also compare the spending trajectories under each of these scenarios on the 'Compare Scenarios' page.

Step 1. Select the council

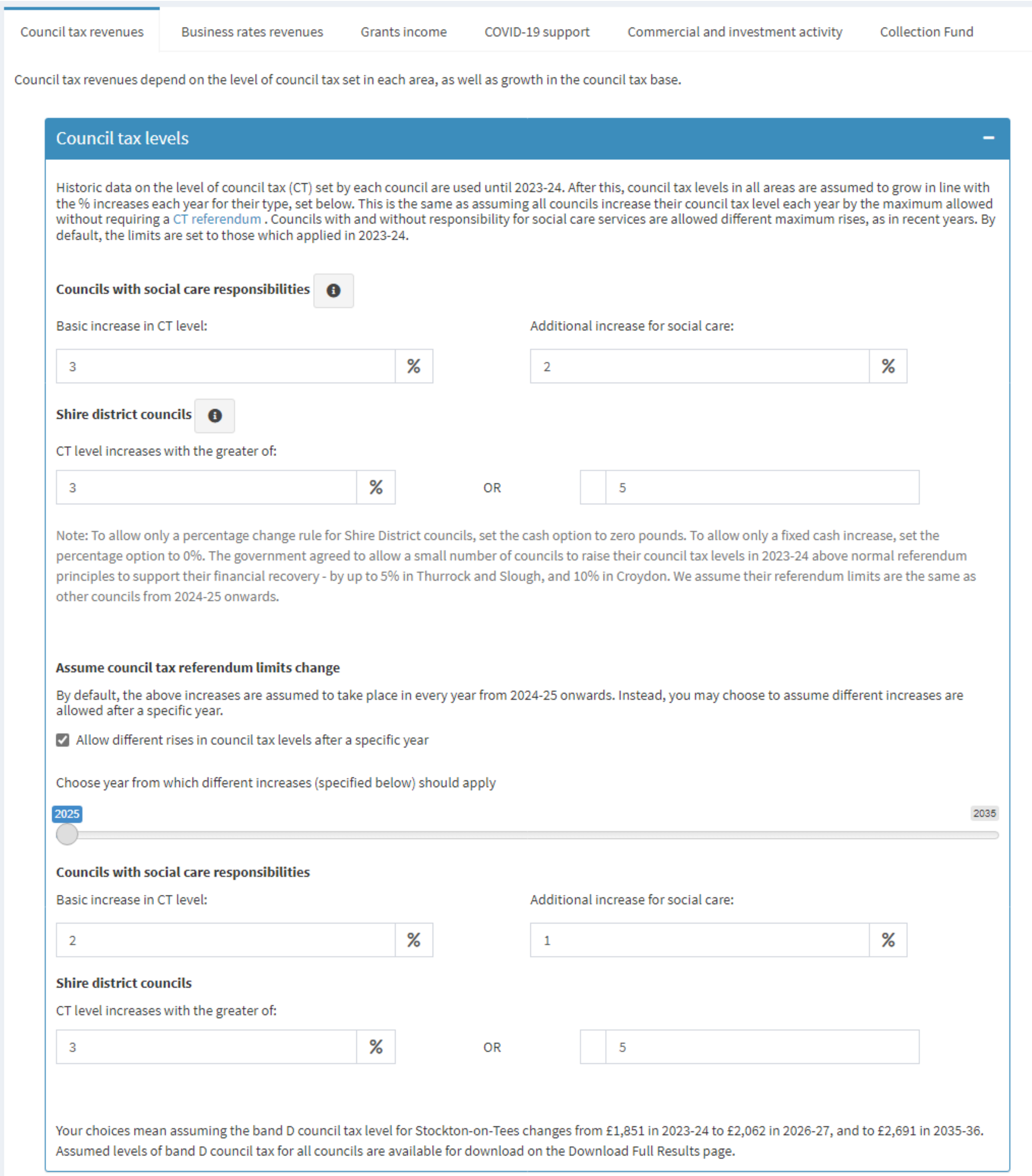
The first step is to select 'Stockton-on-Tees' from the drop-down menu on the 'Welcome' page.

Step 2. Set the assumptions for Scenario A

The next step is to make the changes required to default settings for Scenario A.

Let's start with changes to revenue assumptions. Click 'Revenue Projections' on the main menu bar, which will initially take you to assumptions related to council tax revenues. In the first box on council tax levels, tick the option 'Allow different rises in council tax levels after a specific year' and make sure the slide is set to 2025. Below this, change the 'Basic increase in CT level' from 3% to 2% and the 'Additional increase for social care' from 2% to 1%. Next, move to the 'Business rates revenues' tab. In the second box, which is for assumptions related to tax base growth, make sure option 1 ('1: Single real growth rate for all areas, %') is selected and set that assumed growth rate to 0.5%.

Figure 4.1. Setting the increase in council tax levels

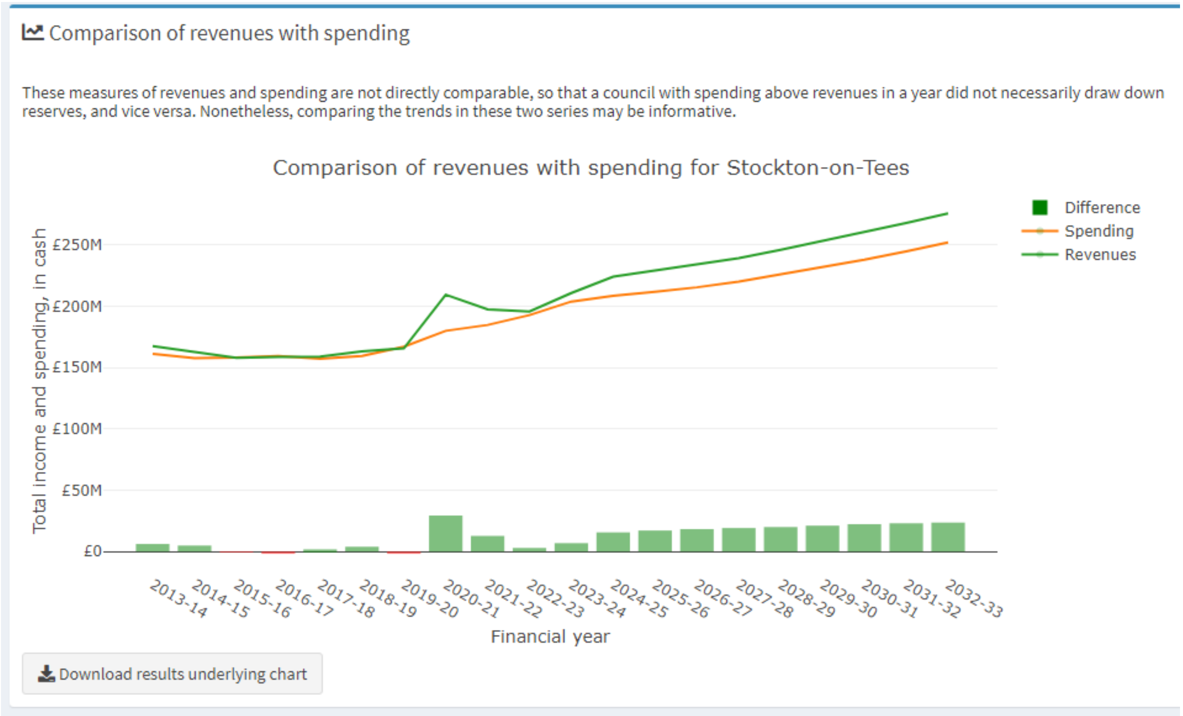


Step 3. View and download results for Scenario A

After making the necessary changes to the default assumptions, the modelling results can be viewed and downloaded. To do this, select the ‘Main Results’ page from the main menu bar.

For the purposes of this scenario, we will keep with aggregate cash-terms figures. As you scroll down, you can look at the projections of revenues by source and spending by service area generated by the model. We want the third chart though: the ‘Comparison of revenues with spending’ one. This shows that under the selected assumptions, revenues from the modelled income sources are projected to grow slightly more quickly than service spending requirements. Note, however, that not all income streams and spending items are incorporated by default. And remember this is illustrative only and is not an IFS, CIPFA or DCN projection of the actual funding outlook for Stockton-on-Tees.

Figure 4.2. Comparing revenues and spending under Scenario A



To download the chart image itself, hover over the chart and click the camera icon. To download the data underlying the chart, click the button below the chart.

Step 4. Save modelling results for Scenario A for later comparison

Next click the 'Compare Scenarios' button on the main menu bar to move to the 'Compare Scenarios' page. To save the current scenario, use the first (red) slot, give it a name ('Scenario A') and click 'Save current'.

Step 5. Repeat steps 2–4 for Scenario B

After saving Scenario A, you are free to make the changes to assumptions required for Scenario B, and can then download the modelling results and save this scenario for comparison with the other scenarios.

There is only one assumption to change: demand growth for children's social services. Click 'Spending Projections' on the main menu bar, and then go to the 'Service-specific assumptions' tab. Open up the children's social care box by clicking on the '+' button next to it, and then replace the percentage by which demand grows to growth in the population aged 0 to 17, plus 2% instead of plus 1%.

Going back to the ‘Main Results’ page shows that, with higher growth in children’s social care spending, revenues from the modelled income sources are projected to grow slightly less quickly than service spending requirements. Remember this is illustrative only and is not an IFS, CIPFA or DCN projection of the funding outlook for Stockton-on-Tees. Download the chart image and data and then save this scenario on the ‘Compare Scenarios’ page as ‘Scenario B’ in the green slot.

Step 6. Repeat steps 2–4 for Scenario C

Scenario C requires changes to revenue assumptions and spending assumptions.

First, change the assumptions for growth in public health and social care grants. Click ‘Revenue Projections’ on the main menu bar and then select the ‘Grants income’ tab. Access options for the public health grant by clicking the ‘+’ button next to it. Then select option 3 (‘Same growth rate each year, %’) and set it to 4%. Repeat this for social care grants and for the improved better care fund (which is another type of social care grant). Note that as discussed in Section 3.4, there are several different options for how these grants are allocated between councils. For the purposes of this example, assume that these are in line with grant allocations in 2023–24.

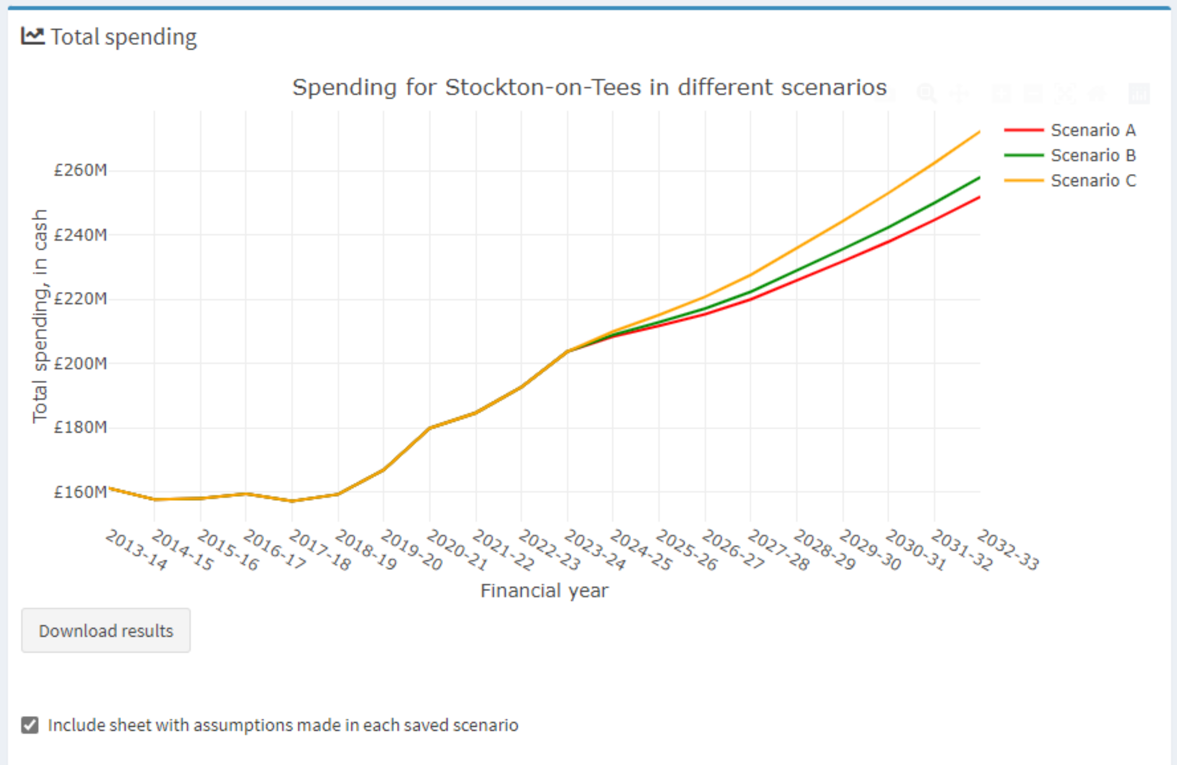
Second, change the assumptions for public health demand and adult social care demand growth. Select ‘Spending Projections’ on the main menu bar and then select the ‘Service-specific assumptions’ tab. Open up the public health assumptions by clicking on the plus button next to it. Then under ‘Demand for services’ select ‘Growth in population (all ages), plus or minus some %’ and set this to 1.5%. Open up the adult social care assumptions by clicking on the plus button next to it. Then under ‘Demand for services’ select ‘Some % each year’ and set this to 3%.

Going back to the ‘Main Results’ page shows that with faster growth in grant funding, but higher growth in demand for adult social care and public health services, revenues from modelled income sources will grow more slowly than service spending requirements. Remember this is illustrative only and is not an IFS, CIPFA or DCN projection of the funding outlook for Stockton-on-Tees. Download the chart image and data and then save this scenario on the ‘Compare Scenarios’ page as ‘Scenario C’ in the gold slot.

Step 7. Download the spending scenario comparison chart and underlying data

The last stage is to download the image and data for the spending comparison chart: hover over the chart and click the camera item, and then click the ‘Download results’ button.

Figure 4.3. Comparing service spending requirements under Scenarios A, B and C



Summary of findings

This example shows how the model can be used to examine how sensitive the outlook for revenues and service spending requirements is to assumptions about grant funding, demand growth and cost growth. In this instance, an increase in the assumed rate of demand growth for children's social care services from 1% to 2% per year was sufficient to move from a situation where revenue growth would slightly outpace growth in service spending requirements to a situation where it would slightly lag. 4% growth (rather than growth in line with inflation) for public health and social care grants was found to be insufficient to compensate for 1.5% growth in demand for public health services per capita and 3% growth in demand for adult social care services.

Remember these results are illustrative only and do not represent IFS, CIPFA or DCN projections of the funding outlook for Stockton-on-Tees.

4.2 Analysing the impact of business rates resets on Cherwell

In this example, we will use the model to analyse the effects of some hypothetical funding system reforms on Cherwell District Council. These are illustrative only and do not represent the views of IFS, CIPFA or DCN of likely funding reforms, nor do the results obtained represent the views of IFS, CIPFA or DCN on how revenues and spending will evolve for this council. The reforms to be considered are:

- a full reset of the business rates retention system in 2025;
- either a full reset every five years after this, or a phased reset after three years;
- either retain the current levy system or reform the levy system so that it acts as a cap on growth.

For the purposes of this example, we will use the default settings of the model, except that:

- the business rates tax base will be assumed to grow by 0.5% in all local areas with the exception of Cherwell, where it is assumed to grow by 2% a year;
- Cherwell is no longer part of the North Oxfordshire business rates pool.

Step 1. Select the council

The first step is to select ‘Cherwell’ from the drop-down menu on the ‘Welcome’ page.

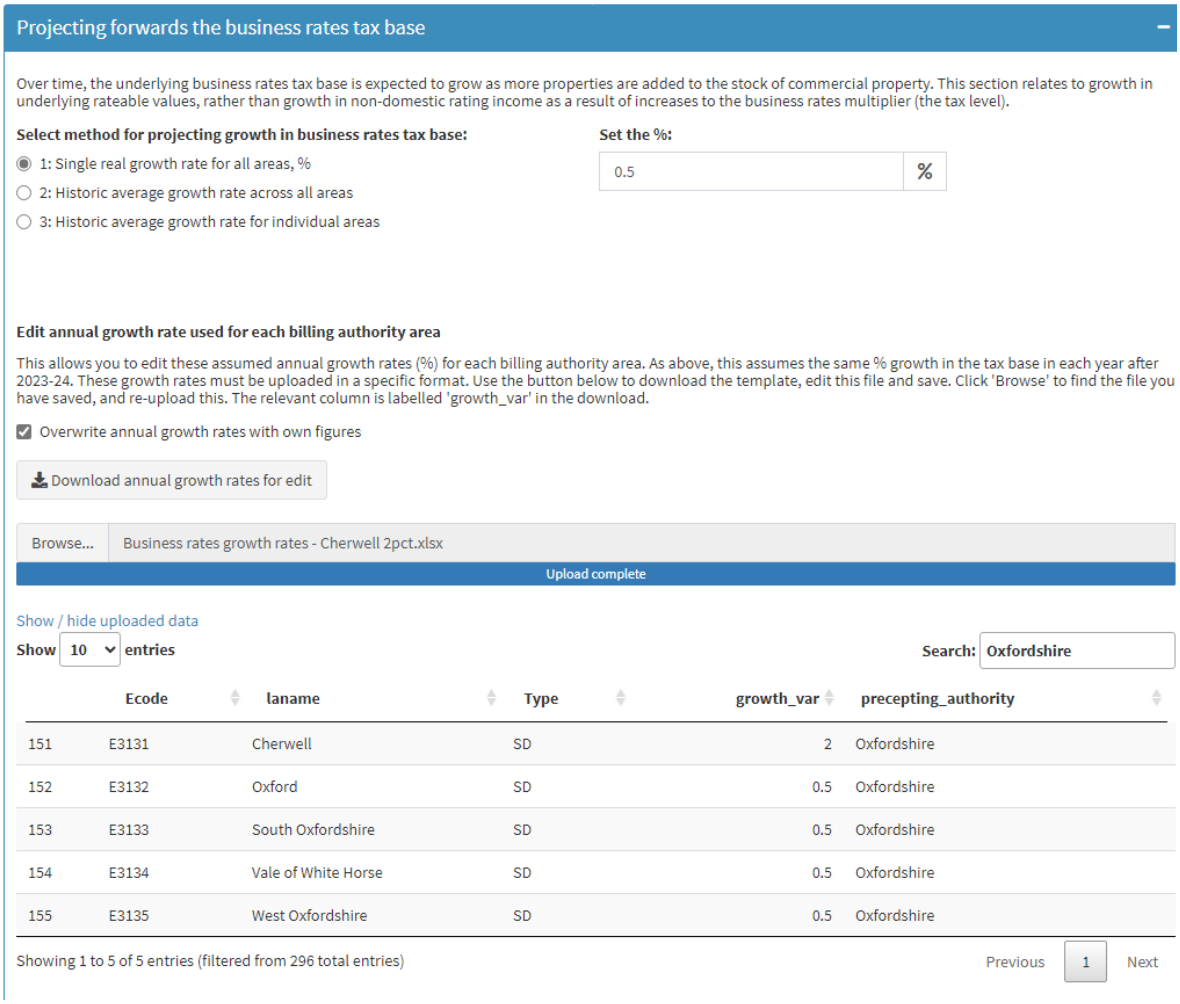
Step 2. Set the business rates revenue and pooling assumptions

The next step is to make the changes to default settings. To do this, click ‘Revenue Projections’ on the main menu bar and go to the ‘Business rates revenues’ tab.

Scroll down to the options related to the business rates tax base. You can set an assumption of 0.5% growth for all other authorities by making sure option 1 (‘Single real growth rate for all areas, %’) is selected and then setting that growth rate to 0.5%.

You then need to overwrite the growth rate for Cherwell itself. As we are assuming the growth rate is 2% every year, you can tick the box to ‘Overwrite annual growth rates with own figures’. Download the file, make the edit to Cherwell’s figure, save and re-upload – remembering not to change any formatting of the spreadsheet. If you want to see that this has worked, you can click ‘Show/hide uploaded data’ and search for the Oxfordshire billing authority areas by typing ‘Oxfordshire’ in the search box. As shown in Figure 4.4, this shows a growth rate of 2% for Cherwell and 0.5% for the other areas.

Figure 4.4. Uploading a council-specific business rates tax base growth assumption



Finally, scroll down and expand the 'Business rates pooling arrangements' and make sure that 'Include pools in years after 2023–24' is switched off.

Step 3. Save the 'no reset' system to allow comparisons

Now click on the 'Compare Scenarios' menu option and wait a few seconds for the model to calculate the projections of Cherwell's revenues using these assumptions.

To compare funding in inflation-adjusted terms, select 'Real (2022–23 prices)'.

Next, give this baseline scenario a name (e.g. 'Baseline – no reset') and save it.

Step 4. Modelling full resets of the business rates retention system

To model resets of the business rates retention system, select the 'Funding System Reforms' page from the main menu.

First, select what type of resets you wish to model. Choose ‘2. Full resets only’.

This then provides two further options:

- when the first full reset should take place: choose 2025 on the sliding scale;
- and then how frequently subsequent full resets take place: choose 5 years.

The table underneath then shows the pattern of resets under the selected assumptions – in this case, full resets in 2025, 2030 and 2035.

To see the effects on Cherwell’s revenues, go to the ‘Compare Scenarios’ page. Name this scenario (e.g. ‘Reset 2025 – full resets’) and save it. Comparing revenues under this scenario with the baseline scenario shows that resetting the business rates retention system by redistributing retained growth in line with baseline funding levels will significantly reduce Cherwell’s revenues. Subsequent resets would also redistribute revenue away from Cherwell under the assumptions selected, as its faster (2%) growth would be redistributed around the rest of England.

Remember these results are illustrative only and do not represent IFS, CIPFA or DCN projections of the funding outlook for Cherwell.

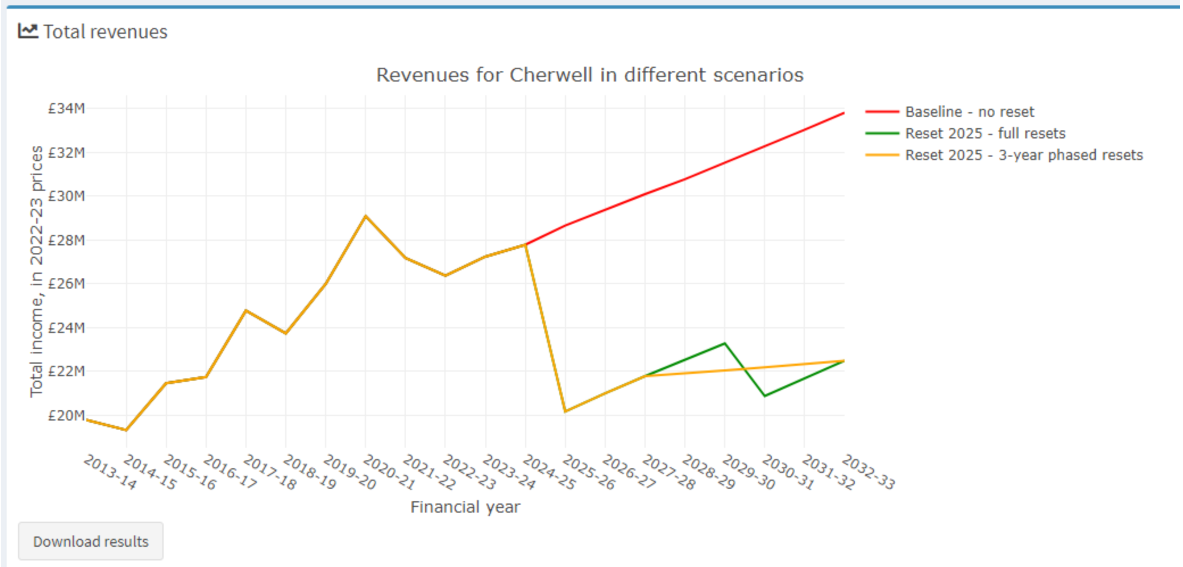
Step 5. Modelling phased resets of the rates retention system

To model phased resets after the initial full reset, go back to the ‘Business rates resets’ tab on the ‘Funding System Reforms’ page. Then select ‘4. Phased (rolling) resets’ and set them to occur on a 3-year cycle.

Go back to ‘Compare Scenarios’, name this scenario ‘Reset 2025 – 3-year phased resets’ and save it. As is shown in Figure 4.5, compared with the five-yearly full reset, the three-yearly phased resets smooth Cherwell’s revenues. This is because once the phased reset cycle starts, Cherwell is able to keep the latest year of growth, but growth from three years previously is redistributed. These broadly offset each other.

At this stage you could download the charts or the data underlying them for use in reports or presentations.

Figure 4.5. Comparing no reset, full resets and phased resets



Step 6. Modelling changes to the levy system

For the final part of the exercise, let’s assume that there will be five-yearly full resets after 2024. Remove the phased reset scenario by clicking ‘Clear saved’.

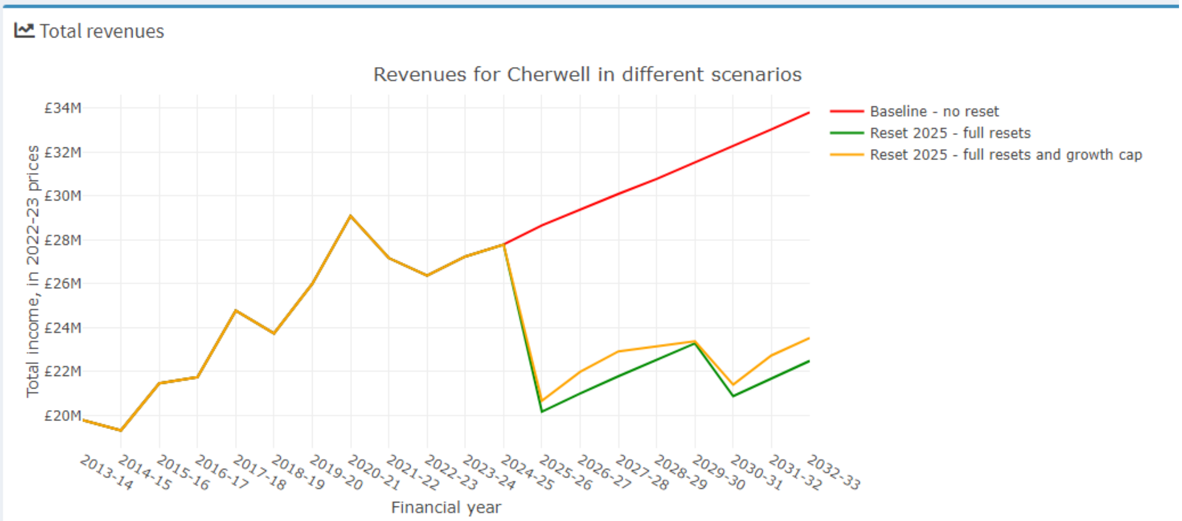
Now let’s model how changing the system of levies will affect results.

To do this, first go back to the ‘Business rates resets’ tab under the ‘Funding System Reforms’ menu option. Re-select ‘2. Full resets only’.

Next go to the ‘Business rates system’ tab. This tab is where assumptions related to wider business rates retention reform can be changed. To do this, first tick the box to ‘Include the impact of changes to the business rates retention system’ and ensure that these reforms take effect from 2025.

Scroll down to the options related to levy payments. To model the new levy system, make sure option 2 (‘Cap on growth …’) is selected, and choose the cap you want to set. For now, let’s set this to 175%.

Figure 4.6. Comparing the effects of different levy options



To see the effect of this on Cherwell's funding, go back to the 'Compare Scenarios' tab, and name and save this tab in the now empty third (orange) slot: 'Reset 2025 – full resets and growth cap'. Comparing funding with the scenario where the current levy remains in place, you can see that funding is higher under the new-style levy each year. This is because there is no levy until the cap hits and the cap is set sufficiently high that growth only reaches that level after the third year. However, the rate of growth of funding from the third year onwards is slower than under the current type of levy.

Remember these results are illustrative only and do not represent IFS, CIPFA or DCN projections of the funding outlook for Cherwell.

Summary of findings

The model shows that under the assumptions chosen, a full business rates reset would reduce Cherwell's funding significantly. On the basis of Cherwell's business rates tax base growth outpacing that of the rest of the country in future years, subsequent full or phased resets would also reduce Cherwell's funding in later years, although the profile of funding would be smoother under the 'phased' reset approach. Reforming the levy so it operates as a cap would benefit Cherwell under the assumptions chosen, provided the cap were set sufficiently high.

Remember these results are illustrative only and do not represent IFS, CIPFA or DCN projections of the funding outlook for Cherwell.

5. Frequently asked questions

This section provides answers to some questions you may have about the model. We will update this section when asked specific questions by model users, where we think the questions and answers are likely to have wider relevance.

1. What is the purpose of the model?

The IFS–CIPFA Local Government Finance Model is designed to allow councils to analyse how their revenues and spending may evolve in the medium to longer term, and explore the effects of planned and alternative funding system reforms. Users can opt to use the model's default assumptions for different revenue streams and spending items or use their own assumptions. This makes it particularly suited to sensitivity and scenario analysis. Section 2 of this guide provides further information on what the model is and isn't designed to be used for, and Section 4 provides worked examples illustrating how the model can be used.

2. Which councils are included in the model?

Users can select from counties, London boroughs, metropolitan districts, shire districts and unitary authorities. Underlying calculations account, where necessary, for other authority types. The model only includes councils in England as there are different funding arrangements for local government in other parts of the UK.

Where local authority reorganisation has taken place, data for former councils are available to provide context. Projections are available for councils on April 2023 boundaries.

3. What revenues and spending items does the model project?

The model, by default, includes revenues from council tax, business rates and those grants that are included within councils' core spending power, as well as the ring-fenced Public Health Grant. It includes spending on services (and associated levies for waste and transport authorities) with the exception of schools and early years education spending. Users can upload and add their own figures and projections for other income sources (such as other grants and commercial and investment income) and spending items (such as debt servicing costs). See Section 3 of this guide for further information on how to do this.

4. How were default assumptions chosen?

Default assumptions have been chosen, in consultation with experts from local government, to provide a reasonable guide to how revenues and spending may evolve in the medium to longer term given current policy. All assumptions can be varied by users. Appendix B provides full information on the default assumptions used in the model.

5. What data does the model use?

The model, by default, uses publicly available official data collected from councils. This includes information on council tax bases and levels, business rates collections, grant funding, and spending outturns and forecasts. It also uses official forecasts and projections for inflation, earnings growth, and changes in population and household numbers. Appendix A provides full information on the data used in the model.

6. Are any of the data that I upload or scenarios that I create stored in a central repository?

No, the model does not store any data you upload for use in the model, or changes you make to the default assumptions. It can create a bespoke URL for you to reload the model in future with the assumptions you have selected. However, because uploaded data are not stored, you will need to re-upload them. See Section 3 for further information.

7. How might I use the outputs from the model?

Results from any of the scenarios generated could be incorporated into a wide range of reports or presentations in chart or tabular format, either as images or by re-creating the charts yourself from the downloadable data. These may be useful for audiences such as councils' executives or scrutiny committees.

8. How do I cite outputs from the model?

Charts, tables and other information based on the results of the model should be cited as '*[Council name / Department or team name / "Own"] analysis using the IFS–CIPFA Local Government Finance Model*'. They should *not* be cited as being IFS analysis (or CIPFA or DCN analysis).

9. Who built the model?

This model was developed collaboratively by IFS, CIPFA and DCN, with IFS researchers taking the lead in the coding of the model using the R programming language.

10. How is this model available free of charge? Who maintains and supports the model?

This model was developed using funding from the Economic and Social Research Council (ESRC) as part of its Local Acceleration Fund programme. It is designed to complement rather than compete with the existing tools and services available to local government.

IFS maintains and updates the model, and this work, as well as the hosting of the model, is funded by the ESRC through Impact Acceleration Account (IAA) funding. IFS works with CIPFA and representatives of local government, including the DCN, to disseminate the model to councils.

12. How do I know if the model has been updated?

The 'Release Notes' page of the model will provide information on when the model was last updated and the changes made. You can also sign up to be added to our model mailing list at http://eepurl.com/h6XUUj. We will use this mailing list to inform users of updates to the model.

13. Is there a way I can contribute to future updates to the model?

Yes, you can provide feedback anonymously via a Google form accessible on the 'Feedback' page of the model, or email your comments to the model development team (kate.ogden@ifs.org.uk, david_p@ifs.org.uk, jeffrey.matsu@cipfa.org). We will also contact those who have signed up to our mailing list from time to time for their insights as we update the model.

14. Who do I contact if I notice errors in the model?

Please contact the model development team via email or the Google form (although we cannot respond to you individually if you use the Google form). As the data used in the model are taken from published official data, issues with the data may need to be reported direct to the Department for Levelling Up, Housing and Communities.

A. Input data

The model uses a range of official publicly available data on councils' revenues and spending, as well as forecasts and projections for inflation and earnings and projections for population and household numbers.

Table A.1. Detailed information on sources of input data

Council tax	Council Tax levels set by local authorities in England, Council Tax requirement and chargeable dwelling figures, for years 2013–14 to 2023–24. https://www.gov.uk/government/collections/council-tax-statistics • (2) Parish precepts • (5) Estimated collection rate • (7) Council tax base for council tax setting purposes • (9) Average band D council tax (including ASC precept but excluding local precepts) Council Taxbase statistics, Council Taxbase local authority level data, for years 2013 to 2022. https://www.gov.uk/government/collections/council-taxbase-statistics • (24) Total number of band D equivalents – used for historical tax base growth when excluding changes in localised council tax support schemes
Business rates revenues	Non-domestic rates income and associated data on reliefs and section 31 grants are taken from NNDR3 forms up to 2022–23 and NNDR1 forms in 2023–24. National non-domestic rates collected by councils, for 2013–14 to 2023–24, https://www.gov.uk/government/collections/national-non-domestic-rates-collected-by-councils

	We use the line items that are required for calculating income from the business rates retention system. From the NNDR1 2023–24, for instance, this includes non-domestic rating income (Part 1, line 13), 'other income' (Part 1, lines 16–22), section 31 grants (Part 1, lines 25–35) and the various reliefs that need to be added to the non-domestic rating income when calculating income for the purpose of calculating levy and safety net payments (Part 2, lines 10, 17, 31, 33 and 38-42). Business rates levy surplus distribution 2022 to 2023, https://www.gov.uk/government/publications/business-rates-levy-surplus-distribution-2022-to-2023 Levy account surplus final allocations for 2019 to 2020, https://www.gov.uk/government/publications/levy-account-surplus-final-allocations-for-2019-to-2020 Levy account surplus final allocations for 2018 to 2019, https://www.gov.uk/government/publications/levy-account-surplus-final-allocations-for-2018-to-2019
Business rates retention	Information pertaining to the operation of the business rates retention system (such as baseline funding levels, tariffs/top-ups, tier shares) is taken from each year's local government finance settlement. Key information for local authorities: final local government finance settlement 2023 to 2024, https://www.gov.uk/government/publications/key-information-for-local-authorities-final-local-government-finance-settlement-2023-to-2024 Authorities with increased business rates retention arrangements: final local government finance settlement 2023 to 2024, https://www.gov.uk/government/publications/authorities-with-increased-business-rates-retention-arrangements-final-local-government-finance-settlement-2023-to-2024 • Explanatory note for authorities with increased business rates retention arrangements – for other income streams forgone • Supporting table for authorities with increased business rates retention arrangements – for information on arrangements under 50% retention

	Key information for pools: final local government finance settlement 2023 to 2024, https://www.gov.uk/government/publications/key-information-for-pools-final-local-government-finance-settlement-2023-to-2024 Business rates levy and safety net calculator, for various years, https://www.gov.uk/government/collections/business-rates-retention
Grants income	Information on grants is taken from a range of sources, including each year's local government finance settlement, grant determination letters, etc. Core spending power: final local government finance settlement 2023 to 2024, Core spending power supporting information, for years 2015–16 onwards, https://www.gov.uk/government/publications/core-spending-power-final-local-government-finance-settlement-2023-to-2024 • Improved Better Care Fund, Winter Pressures Grant (2018–19 and 2019–20 only), and ASC Discharge Fund (2023–24) • New Homes Bonus, and New Homes Bonus returned funding • Rural Services Delivery Grant • Transition Grant (2016–17 and 2017–18 only) • Social care grants: Adult Social Care Support Grant; Social Care Support Grant; Social Care Grant • Lower Tier Services Grant (2021–22 and 2022–23 only) • Market Sustainability and Fair Cost of Care Fund (2022–23 only) and ASC Market Sustainability and Improvement Fund (2023–24 only) • Services Grant (from 2022–23) • Grants rolled in (years to 2022–23) • Funding Guarantee (2023–24 only) Change in spending power: final local government finance settlement 2014 to 2015, Spending power 2014 to 2015 supporting information, for 2013–14 and 2014–15, https://www.gov.uk/government/publications/change-in-spending-power-final-local-government-finance-settlement-2014-to-2015

	• New Homes Bonus, and New Homes Bonus returned funding DHSC, Public health grants to local authorities, for the years 2013–14 to 2023–24 (and indicative allocations for 2024–25) • https://www.gov.uk/government/publications/ring-fenced-public-health-grants-to-local-authorities-2013-14-and-2014-15 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2016-to-2017 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2017-to-2018 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2019-to-2020 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2020-to-2021 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2021-to-2022 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2022-to-2023 • https://www.gov.uk/government/publications/public-health-grants-to-local-authorities-2023-to-2024
Relative needs formulas	Before new Relative Needs Formulas (RNFs) are available, the model includes options to use existing RNFs for adult social care services, and for all services, when allocating out some grant funding. DCLG, 2013-14 Relative Need Formulae (RNFs) by Service, https://webarchive.nationalarchives.gov.uk/ukgwa/20140505104701/http://www.local.communities.gov.uk/finance/1314/settle.htm Shares of 2013–14 settlement funding assessments (SFAs) are inferred from allocations of the 2023/24 services grant.
COVID funding	Information on the COVID-related financial support provided to councils is as published by DLUHC, supplemented with published data from other departments. DLUHC, COVID-19 local authority funding summary table, https://www.gov.uk/government/publications/covid-19-emergency-funding-for-local-government With further information from: • https://www.gov.uk/government/publications/extended-rights-to-free-school-travel--2 • https://www.gov.uk/government/publications/household-support-fund-guidance-for-local-councils

	• https://www.gov.uk/government/publications/covid-local-support-grant-guidance-for-local-councils • https://www.gov.uk/government/publications/council-tax-covid-19-hardship-fund-2020-to-2021-guidance
Budget and outturn data	Gross and net expenditure by service area, net commercial and investment income data, and spending on waste and transport levies are taken from Revenue Outturn (RO) forms to 2021–22 and Revenue Budget (RA) forms in 2022–23 and 2023–24. Local authority revenue expenditure and financing England: individual local authority data - outturn, for years 2013–14 to 2021–22, https://www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing DLUHC, Local authority revenue expenditure and financing England: 2022 to 2023 budget individual local authority data, https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2022-to-2023-budget-individual-local-authority-data DLUHC, Local authority revenue expenditure and financing England: 2023 to 2024 budget individual local authority data, https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2023-to-2024-budget-individual-local-authority-data Net spending and (from outturn data only) employee costs; running costs; sales, fees and charges; and other income, for the following service lines: • 165 – other education and community budget ○ For 2013–14, this includes: 51: adult and community learning; 52: other services to young people; 61: special education; 62: learner support; 63: access; 64: local authority education functions • 290 – total highways and transport services • 330 – total children's social care • 360 – total adult social care • 390 – total public health • 490 – total housing services (GFRA only) • 509 – total cultural and related services

	• 581–586 – waste management • 510–570 – other environmental and regulatory services • 599 – total planning and development services • 602 – total fire and rescue services • 690 – total central services • 698 – total other services In addition, the following lines from outturn (budget) data: • 722 (822) – integrated transport authority levy • 724 (824) – waste disposal authority levy • 731 (831) – external trading accounts net surplus(-)/ deficit(+) • 732 (832) – internal trading accounts net surplus(-)/ deficit(+) • 773 (873) – provision for repayment of principal • 781 (881) – interest: external payments • 786 (886) – interest and investment income (-): external receipts and dividends
Informing spending projection defaults	Default assumptions for spending projections have been shaped by analysis of: adult social care demand projections produced by the Personal Social Services Research Unit; national trends in children's social care activity; and analysis of Subjective Analysis Returns: R. Wittenberg, B. Hu and R. Hancock (2018) Projections of Demand and Expenditure on Adult Social Care 2015 to 2040, Personal Social Services Research Unit, https://www.pssru.ac.uk/publications/pub-5421/ DfE, Children looked after in England including adoptions, https://explore-education-statistics.service.gov.uk/data-tables/children-looked-after-in-england-including-adoptions • H1: Children looked after on 31 March, unaccompanied asylum-seeking children on 31 March, and children who started, ceased and were adopted during the years ending 31 March, in England, 1994 to 2021

	DfE, Characteristics of children in need, https://explore-education-statistics.service.gov.uk/data-catalogue/characteristics-of-children-in-need/2021 • A1: National time series of children in need, referrals and assessments, England 2013 to 2021 • A2: National time series of section 47s, initial child protection conferences and child protection plans, England 2013 to 2021 MHCLG, Local authority revenue expenditure and financing England: 2019 to 2020 final outturn, Annex A – General Fund Revenue Account Outturn: Subjective Analysis Return (SAR) 2019-20, https://www.gov.uk/government/statistics/local-authority-revenue-expenditure-and-financing-england-2019-to-2020-final-outturn DLUHC, 2021 Area Cost Adjustment methodology note, Annex C: SAR, https://www.gov.uk/government/publications/2021-area-cost-adjustment/2021-area-cost-adjustment-methodology-note#annex-c-sar
Economic forecasts	Estimates and forecasts for inflation (CPI, RPI, GDP deflator) and earnings growth are taken from the Office for Budget Responsibility's latest forecasts. Beyond the end of the OBR's forecast horizon, our projections use the central assumptions from the OBR's long-term Fiscal sustainability and risks report. Office for Budget Responsibility, March 2023 Economic and fiscal outlook – supplementary economy tables, https://obr.uk/efo/economic-and-fiscal-outlook-march-2023/ • Table 1.6, Average hourly earnings index – financial year • Table 1.7, CPI, RPI and GDP deflator – financial year and each Q3 Office for Budget Responsibility, Fiscal risks and sustainability report – July 2022, https://obr.uk/frs/fiscal-risks-and-sustainability-july-2022/
Population and household figures	Population estimates (up to 2020–21) and projections (from 2021–22) are taken from the Office for National Statistics, as are household projections. They do not yet reflect results from Census 2021.

	Office for National Statistics, Household projections for England, by region and local authority, 2018-based, https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/householdprojectionsforengland Office for National Statistics, Population estimates - local authority based by single year of age (mid-2020 edition), for years to 2020, https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?theme=32 Office for National Statistics, 2018-based population projections – local authorities: SNPP Z1, for years 2021 onwards, https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1
Nearest neighbours	Statistical nearest neighbours' data are as provided by CIPFA, based on its default indicators. CIPFA Nearest Neighbours Model, https://www.cipfa.org/services/cipfastats/nearest-neighbour-model
Deprivation	Relative area deprivation is based on rank of Average score from IMD2019, at upper-tier authority level based on April 2019 authority boundaries. New councils are included in the same quintile as their former constituent authorities. MHCLG, English Indices of Deprivation 2019, https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019.
Relevant policy documents	DLUHC, Business rates retention reform consultation, for options around business rates resets and reform of the rates retention system, https://www.gov.uk/government/consultations/business-rates-retention-reform DLUHC, Review of local authorities' relative needs and resources consultation, for options around the Fair Funding Review, and transitional arrangements, https://www.gov.uk/government/consultations/review-of-local-authorities-relative-needs-and-resources DLUHC, Local government finance policy statement 2023–24 to 2024–25, https://www.gov.uk/government/publications/local-government-finance-policy-statement-2023-24-to-2024-25 HM Treasury, Autumn Statement 2022, https://www.gov.uk/government/publications/autumn-statement-2022-documents

B. Default assumptions

The model has default options for each of the assumptions that are required to project forward funding and spending requirements. These are summarised briefly here, with full details of the choices that users can make, and the specific default assumptions for each input, included in Table B.1.

B.1 Revenues

Council tax levels grow in line with the maximum allowed under the 2023–24 referendum criteria (i.e. 3% plus 2% for social care; 3% or £5 for shire districts). Thurrock, Slough and Croydon were allowed to make larger increases in 2023–24, but we assume they return to the same referendum principles as other councils from 2024–25.

The council tax base grows in line with Office for National Statistics (ONS) projections for changes in the number of households for each local authority. Council tax collection rates in each area are the same in future years as in 2023–24.

We do not include the impact of deficits or surpluses on the Collection Fund in relation to council tax.

The underlying business rates tax base remains unchanged in each local area from 2023–24 onwards. Historically the business rates tax base has grown over time as there has been an increase in the value-adjusted quantum of floor space (new floor space is of higher value than floor space being demolished or replaced). But particularly following the pandemic, trends in the quantum of non-domestic property may change as people shop and work online from home more. A zero-growth assumption therefore seemed a conservative but not unrealistic default assumption.

Business rates multiplier increases in line with forecast consumer price inflation (CPI) to the previous September. It is frozen in any year where forecast CPI is negative. From 2024–25, councils continue to be compensated for underindexation relative to CPI.

Business rates retention pilots are assumed to continue as in 2023–24, and are reflected in higher business rates income, and lower grants income (where pilots involve forgoing specific grants).

Business rate pooling arrangements are reflected in earlier years, and we assume half of any 'pool surplus' is shared in line with above-baseline growth and half in line with funding baselines. By default, pooling is assumed not to continue after 2023–24.

Payments from the levy account are included in our measure of councils' business rate revenues in 2019–20, 2020–21 and 2023–24, but by default, these payments are not assumed to continue in future years.

Business rates reliefs and section 31 grants (excluding those to compensate for underindexation of the multiplier) are assumed to increase with tax base growth and growth in the business rates multiplier. Section 31 grants to compensate for underindexation are assumed to increase with tax base growth, growth in the business rates multiplier and the extent of underindexation. Other business rates income (such as the cost of collection allowance) is fixed in cash terms.

We do not currently model the effect of business rates (or council tax) revaluations.

We use outturn business rate revenue figures where available, and use forecasts for 2023–24. We do not assume any surpluses or deficits in relation to business rates revenues from 2023–24 onwards.

Grant funding includes grants within Aggregate External Finance (AEF), as well as public health grant. Funding for each authority is projected forwards from levels in 2023–24, although each grant is presumed to evolve differently. In general, our default assumption is that grants continue in future years, are maintained in real terms and allocated in the same proportion, or using the same methodology, as in recent years. Where government has announced changes in the value grants in future years, these are reflected in 2024-25. By default, we assume repurposed funding for delayed adult social care reforms is retained after 2024-25.

For some grants, we allow for more complex options, e.g. for New Homes Bonus funding to be redistributed across local government in line with existing relative needs formulas. There are additional options to allocate out a new, custom grant, or to implement a 'minimum funding floor' to limit authorities' year-on-year changes in core spending power.

We assume that no new grants are created and that the government does not implement a minimum funding floor (to protect councils from falls in core spending power) in future years. By default, we assume the Funding Guarantee in 2023-24 is rolled over in cash terms every year.

COVID support is included in 2020–21 and 2021–22 where we have published information on the value of funding and allocations. We include this because COVID-related spending will be reflected in our measures of spending in these years.

Revenues relating to commercial or investment activities are not included by default, but users can provide their own figures for historical and future years; the same is true for spending relating to commercial activities.

B.2 Spending

The baseline year for spending projections is 2023–24, and by default reflects published budgets. Outturn data is not yet available.

Spending is presumed to evolve differently for different service areas, but is modelled using assumptions on two key factors: changes in demand and changes in costs of servicing each unit of demand. For each service area, demand projections will reflect changes in population for the user group in question, and assumptions about how per capita demand will change. Cost projections reflect forecast changes in the GDP deflator by default. If selecting to project from a year when outturn data is available, or providing your own baseline data, cost projections will reflect changes in both labour costs (proxied by average earnings forecasts) and inflation, weighted according to available evidence on the use of inputs used by different services.

For adult social services, the population in question is adults. Demand per adult is based on projections of adult social care services demand by the Personal Social Services Research Unit, adjusted for forecast population growth of different areas, separately for those aged 18–64 and 65+.

For education and children's social services, the population in question is children. Demand for children's social care services is assumed to increase in line with population growth, plus an additional 1% each year, to reflect recent trends in children's social care activity.

For other services, the population used is either the overall population or the number of households.

Spending relating to commercial or investment activities is not included by default.

Waste and transport levies are included as a spending item, and assumed to change in future in line with projected net spending on waste management services and highways & transport services, respectively.

B.3 Funding system

The default assumption is that there is no business rates reset, and there are no changes to the way the business rates retention system operates in future years.

B.4 Economic forecasts

Inflation follows the path forecast by the Office for Budget Responsibility in the March 2023 Economic and Fiscal Outlook. This is for CPI of 9.9%, RPI of 12.7% and growth in the GDP deflator of 5.7% in 2022–23. For 2023–24, the same figures are: 4.1%, 6.4% and 2.5%. CPI is forecast to be very slightly negative in 2025–26.

Population and household projections are the latest official principal projections published by the Office for National Statistics, but do not yet reflect data from Census 2021.

Average hourly earnings follow the path forecast by the OBR in March 2023. This is for growth in average hourly earnings of 5.4% in 2022–23, 4.0% in 2023–24 and 1.1% in 2024–25.

B.5 Detailed table of assumptions

Table B.1 provides detailed information on each of the default assumptions used by the model. Assumptions are grouped according to the revenue and spending element they relate to (e.g. council tax rates and bases, or general spending assumptions). Column 2 lists each specific modelling decision for which an assumption is required. It also provides the model's internal name for that modelling decision – if you contact us in relation to default and alternative assumptions for any modelling decision, it can be useful to refer to it by its 'input_name'. Column 3 lists the available options for that modelling decision. Column 4 says what the default option is.

Table B.1. Detailed information on required modelling decisions, available options, and default assumptions

(1) Section	(2) Modelling decision description (input_name)	(3) Available options	(4) Default
Select council	Selected council (select_la)	Drop-down list	Adur
Revenue Projections – Council tax revenues			
Council tax levels	Basic increase in council tax level for those with social care responsibilities, % (growth_ctrate)	%	3
	Additional increase in council tax level for social care, % (growth_ctrate_sc)	%	2
	Basic increase in council tax level for shire district councils, % (growth_ctrate_sd)	%	3
	Cash increase in council tax level for shire district councils (cash_ctrate_sd)	£	5
	Allow different rises in council tax levels after a specific year (ct_increase_2periods)	TRUE or FALSE	FALSE
	Choose year from which different increases should apply (ct_increase_changeyr)	Range: 2025 to 2035	2025
	Basic increase in council tax level for those with social care responsibilities in 2nd period, % (growth_ctrate_2)	%	3
	Additional increase in council tax level for social care in 2nd period, % (growth_ctrate_sc_2)	%	2

	Basic increase in council tax level for shire district councils in 2nd period, % (growth_ctrate_sd_2)	%	3
	Cash increase in council tax level for shire district councils in 2nd period (cash_ctrate_sd_2)	£	5
Council tax base	Method for projecting growth in the council tax base (ct_projections_opt)	1: Single annual growth rate for all areas, %; 2: Historic average growth rate in CT base across all areas; 3: Historic average growth rate in CT base for individual areas; 4: Forecast growth in number of households for individual areas	4
	Years on which to base average annual growth rate for council tax base (ct_base_avg_years)	Range: 2013 to 2022	2013 to 2019
	Percentage growth in council tax base (growth_ctbase)	%	1
	Exclude changes in CTS from calculation of historic tax base growth (ctbase_exclude_CTS)	TRUE or FALSE	TRUE
	Assumed council tax collection rate in future years (ctcolln_opt)	1: As assumed for each area in 2023–24; 2: Some specific % in all areas	1
	Percentage council tax collection rate in future years if option 2 is selected (ctcolln_pct)	%, 0 to 100	98.01544, the national average for 2023–24
	Overwrite council tax base projections with own figures (overwrite_ctbase_projections)	TRUE or FALSE	FALSE

Parish precepts	Include parish precepts as a revenue and spending item (ct_include_parish)	TRUE or FALSE	FALSE
	Annual increase in level of parish precepts after 2023–24, % (growth_ctrate_parish)	%	6.5, the national average for 2023–24
Revenue Projections – Business rates revenues			
Business rates multiplier	Select method for increasing the BR multiplier in future years (mult_uprate_opt)	1: In line with CPI; 2: By some fixed % each year	1
	Percentage increase in the BR multiplier in future years (mult_uprate_pct)	%	1
	Select method for compensation for under-indexation from 2024-25 onwards (underindex_opt)	1: Compensation relative to CPI; 2: Compensation relative to RPI; 3: No compensation for future under-indexation	1
Business rates base	Select method for projecting growth in business rates tax base (projection_opt)	1: Single real growth rate for all areas, %; 2: Historic average growth rate across all areas; 3: Historic average growth rate for individual areas	1
	Percentage growth in business rates tax base (growth)	%	0
	Years on which to base average annual growth rate for business rates tax base (br_base_avg_years)	1: 2014–15 to 2016–17; 2: 2017–18 to 2019–20	2

	Overwrite annual growth rates for business rates tax base with own figures (overwrite_br_growthrates)	TRUE or FALSE	FALSE
	Overwrite growth rates for business rates tax base for each council each year with own figures (overwrite_br_projections)	TRUE or FALSE	FALSE
Increased business rates retention arrangements	Include pilots in years after 2023–24 (pilots_on)	TRUE or FALSE	TRUE
	Choose which year's pilot schemes to copy after 2023–24 (pilots_new_year)	Range: 2017 to 2023	2023
Business rates pooling	Include pools in years after 2023–24 (pools_on)	TRUE or FALSE	FALSE
	Choose which year's pools to copy after 2023–24 (pools_new_year)	Range: 2013 to 2023	2023
	Select the proportion of pool surplus that is allocated in proportion to each council's above-baseline growth (pools_surplus_propn)	%, 0 to 100	50
	Assume no pool makes a deficit in future years (future_pool_deficits_off)	TRUE or FALSE	FALSE
	Overwrite allocations of pool surpluses with own figures (overwrite_pool_surplus)	TRUE or FALSE	FALSE
Distributing the levy account surplus	Include payments from the levy account in future years (levy_account_on)	TRUE or FALSE	FALSE
Revenue Projections – Grants income			

Evolution of specific grants	Final year in which councils will receive revenue support grant (rsg_grant_end)	Range: 2023 to 2035	2035
	Select option for growth in revenue support grant (rsg_opt)	1: Forecast CPI, plus some %; 2: Same growth rate each year, %	1
	Percentage growth in revenue support grant (rsg_pct)	%	0
	Final year in which councils will receive rural services delivery grant (rsdg_grant_end)	Range: 2023 to 2035	2035
	Select option for growth in rural services delivery grant (rsdg_opt)	1: Fixed in cash terms; 2: Same growth rate each year, %	1
	Percentage growth in rural services delivery grant (rsdg_pct)	%	0
	Final year in which councils will receive public health grant (ph_grant_end)	Range: 2024 to 2035	2035
	Select option for growth in public health grant (ph_opt)	1: Forecast increase in the GDP deflator (i.e. fixed in real terms); 2: Forecast increase in the GDP deflator, plus some %; 3: Same growth rate each year, %	1
	Percentage growth in public health grant (ph_pct)	%	0
	Include repurposed funding for delayed reforms after 2024-25 (scgrant_incl)	TRUE or FALSE	TRUE

	Method for allocating social care grants (scgrant_meth)	1: Same share of funding as in 2023–24; 2: In line with existing ASC relative needs formula (RNF); 3: Existing funding rolled over, with increases each year allocated in line with ASC RNF; 4: Full amount in line with ASC RNF, but fully accounting for ASC CT precept	1
	Select option for growth in social care grants (scgrant_opt)	1: Forecast increase in the GDP deflator (i.e. fixed in real terms); 2: Forecast increase in the GDP deflator, plus some %; 3: Same growth rate each year, %	1
	Percentage growth in social care grants (scgrant_pct)	%	0
	Method for allocating Improved Better Care Fund (ibcf_meth)	1: Same as historic distribution (2020–21 to 2023–24); 2: In line with ASC relative needs formula (RNF); 3: With ASC RNF, but fully accounting for ASC CT precept; 4: With ASC RNF, only partially accounting for ASC CT precept	1
	Set the share of Improved Better Care Fund allocated without regard to CT-raising powers (ibcf_propn)	%, 0 to 100	0

	Select option for growth in Improved Better Care Fund (ibcf_opt)	1: Forecast CPI, plus some %; 2: Same growth rate each year, %	1
	Percentage growth in Improved Better Care Fund (ibcf_pct)	%	0
	Select option for growth in funding for ASC Market sustainability (scref_opt)	1: Forecast increase in the GDP deflator (i.e. fixed in real terms); 2: Forecast increase in the GDP deflator, plus some %; 3: Same growth rate each year, %	1
	Percentage growth in funding for ASC Market sustainability (scref_pct)	%	0
	Select option for the future of New Homes Bonus funding after 2023–24 (nhb_meth)	1: Ends, with this funding lost to local government; 2: Ends, with the funding being redistributed across local government; 3: Continues, and is distributed in line with payments made in 2023–24	3
	Method for redistributing New Homes Bonus funding between councils (nhb_redist)	1: In line with assessed spending needs (2013 SFA); 2: In line with existing RNFs; 3: In line with population each year, but with a specific split between lower and upper tiers	2

	Percentage of redistributed New Homes Bonus funding going to lower-tier councils in two-tier areas (nhb_lowertier)	%, 0 to 100	80
	Final year in which councils will receive Services Grant (servgrant_end)	Range: 2023 to 2035	2035
	Method for distributing Services Grant funding between councils in future years (servgrant_redist)	1: In the same way as in 2022–23; 2: In line with population each year, but with a specific split between lower and upper tiers	1
	Percentage of redistributed Services Grant funding going to lower-tier councils in two-tier areas (servgrant_lowertier)	%, 0 to 100	80
Custom options	Set the total value of the new grant in the first year, in pounds (newgrant_value)	£	0
	Choose the year(s) in which councils will receive the new grant (newgrant_years)	Range: 2023 to 2035	2024 to 2029
	Method for allocating the new, custom grant between councils (newgrant_meth)	1: Shares of settlement funding assessment in 2013–14; 2: In line with existing RNF shares; 3: In line with population each year, but with a specific split between lower and upper tiers; 4: In line with existing adult social care RNFs	1
	Percentage of new grant going to lower-tier councils in two-tier areas (newgrant_lowertier)	%, 0 to 100	50

	How new grant grows after the first year (newgrant_opt)	1: Forecast CPI, plus some %; 2: Same growth rate each year, %	1
	Percentage growth in new grant after the first year (newgrant_pct)	%	0
	Select option for the future of the Funding Guarantee after 2023–24 (funding_floor_opt)	1: Is rolled over in cash-terms every year; 2: Ends, with the funding lost to local government; 3: Is not continued, but is replaced by an alternative funding floor	1
	Choose the year(s) in which the alternative funding floor will operate (funding_floor_years)	Range: 2024 to 2035	2024 to 2035
	Set the minimum % year-on-year change in core spending power guaranteed by the floor (funding_floor_trigger)	%	0
	Overwrite projected grants income for selected council with own figures (overwrite_grants_projections)	TRUE or FALSE	FALSE
Revenue Projections – COVID support, Commercial and investment activity, and Collection Fund			
COVID support	Sources of COVID support to include in 2020–21 (covid_selected_2020)	See user interface for list	All in list, except Council Tax Hardship Fund
	Sources of COVID support to include in 2021–22 (covid_selected_2021)	See user interface for list	All in list

	Overwrite COVID funding for selected council with own figures (overwrite_covid_projections)	TRUE or FALSE	FALSE
Commercial income	Commercial and other income lines to include (commcl_selected_inc)	List: external trading account surplus; internal trading account surplus; interest and investment income	None
	Overwrite projected commercial income for selected council with own figures (overwrite_commcl_inc_projections)	TRUE or FALSE	FALSE
Collection Fund surplus (deficit)	Provide own figures for Collection Fund surpluses (deficits) (overwrite_colln_fund_projections)	TRUE or FALSE	FALSE
Spending Projections			
General assumptions	Choose baseline year to use for spending projections (spend_baseline_opt)	Range: 2019 to 2023	2023
	Overwrite baseline spending for selected council with own figures (overwrite_spend_bline)	TRUE or FALSE	FALSE
	Overwrite projected net spending for selected council with own figures (overwrite_spend_projections)	TRUE or FALSE	FALSE
Education	Level of detail for projections of net spending on education services (ed_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for education services (ed_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1

	Method for projecting growth in demand for education services (ed_opt_demand)	1: Growth in population aged 0 to 17; 2: Growth in population aged 0 to 17, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for education services (ed_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for education services (ed_opt_pct_cost)	%	0
	Percentage increase in demand for education services (ed_opt_pct_demand)	%	0
	Percentage increase in employee costs for education services (ed_opt_pct_empl)	%	0
	Percentage increase in running costs for education services (ed_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from education services (ed_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for education services (ed_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for education services (ed_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and	3

		earnings growth; 4: Some % each year	
	Method for projecting growth in sales, fees and charges and other income from education services (ed_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Children's social care	Level of detail for projections of net spending on children's social care services (csc_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for children's social care services (csc_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for children's social care services (csc_opt_demand)	1: Growth in population aged 0 to 17; 2: Growth in population aged 0 to 17, plus or minus some %; 3: Some % each year	2
	Method for projecting growth in employee costs for children's social care services (csc_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for children's social care services (csc_opt_pct_cost)	%	0
	Percentage increase in demand for children's social care services (csc_opt_pct_demand)	%	1
	Percentage increase in employee costs for children's social care services (csc_opt_pct_empl)	%	0

	Percentage increase in running costs for children's social care services (csc_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from children's social care services (csc_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for children's social care services (csc_opt_pct_w_runn)	%, 0 to 100	40
	Method for projecting growth in running costs for children's social care services (csc_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from children's social care services (csc_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Adult social care	Level of detail for projections of net spending on adult social care services (asc_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for adult social care services (asc_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for adult social care services (asc_opt_demand)	1: PSSRU national demand projections, adjusted for local population growth; 2: Growth in population aged 18	1

		and over, plus or minus some %; 3: Some % each year	
	Method for projecting growth in employee costs for adult social care services (asc_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for adult social care services (asc_opt_pct_cost)	%	0
	Percentage increase in demand for adult social care services (asc_opt_pct_demand)	%	0
	Percentage increase in employee costs for adult social care services (asc_opt_pct_empl)	%	0
	Percentage increase in running costs for adult social care services (asc_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from adult social care services (asc_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for adult social care services (asc_opt_pct_w_runn)	%, 0 to 100	40
	Method for projecting growth in running costs for adult social care services (asc_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and	3

		earnings growth; 4: Some % each year	
	Method for projecting growth in sales, fees and charges and other income from adult social care services (asc_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Public health	Level of detail for projections of net spending on public health services (ph_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for public health services (ph_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for public health services (ph_opt_demand)	1: Growth in population (all ages); 2: Growth in population (all ages), plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for public health services (ph_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for public health services (ph_opt_pct_cost)	%	0
	Percentage increase in demand for public health services (ph_opt_pct_demand)	%	0

	Percentage increase in employee costs for public health services (ph_opt_pct_empl)	%	0
	Percentage increase in running costs for public health services (ph_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from public health services (ph_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for public health services (ph_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for public health services (ph_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from public health services (ph_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Highways and transport	Level of detail for projections of net spending on highways and transport services (tpt_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for highways and transport services (tpt_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1

	Method for projecting growth in demand for highways and transport services (tpt_opt_demand)	1: Growth in number of households; 2: Growth in number of households, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for highways and transport services (tpt_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for highways and transport services (tpt_opt_pct_cost)	%	0
	Percentage increase in demand for highways and transport services (tpt_opt_pct_demand)	%	0
	Percentage increase in employee costs for highways and transport services (tpt_opt_pct_empl)	%	0
	Percentage increase in running costs for highways and transport services (tpt_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from highways and transport services (tpt_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for highways and transport services (tpt_opt_pct_w_runn)	%, 0 to 100	60

	Method for projecting growth in running costs for highways and transport services (tpt_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from highways and transport services (tpt_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Housing	Level of detail for projections of net spending on housing services (hous_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for housing services (hous_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for housing services (hous_opt_demand)	1: Growth in number of households; 2: Growth in number of households, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for housing services (hous_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for housing services (hous_opt_pct_cost)	%	0

	Percentage increase in demand for housing services (hous_opt_pct_demand)	%	0
	Percentage increase in employee costs for housing services (hous_opt_pct_empl)	%	0
	Percentage increase in running costs for housing services (hous_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from housing services (hous_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for housing services (hous_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for housing services (hous_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from housing services (hous_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Culture and related	Level of detail for projections of net spending on culture and related services (cult_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for culture and related services (cult_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1

	Method for projecting growth in demand for culture and related services (cult_opt_demand)	1: Growth in population (all ages); 2: Growth in population (all ages), plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for culture and related services (cult_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for culture and related services (cult_opt_pct_cost)	%	0
	Percentage increase in demand for culture and related services (cult_opt_pct_demand)	%	0
	Percentage increase in employee costs for culture and related services (cult_opt_pct_empl)	%	0
	Percentage increase in running costs for culture and related services (cult_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from culture and related services (cult_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for culture and related services (cult_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for culture and related services (cult_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and	3

		earnings growth; 4: Some % each year	
	Method for projecting growth in sales, fees and charges and other income from culture and related services (cult_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Planning and development	Level of detail for projections of net spending on planning and development services (plan_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for planning and development services (plan_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for planning and development services (plan_opt_demand)	1: Growth in number of households; 2: Growth in number of households, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for planning and development services (plan_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for planning and development services (plan_opt_pct_cost)	%	0
	Percentage increase in demand for planning and development services (plan_opt_pct_demand)	%	0

	Percentage increase in employee costs for planning and development services (plan_opt_pct_empl)	%	0
	Percentage increase in running costs for planning and development services (plan_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from planning and development services (plan_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for planning and development services (plan_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for planning and development services (plan_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from planning and development services (plan_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Waste management	Level of detail for projections of net spending on waste management services (waste_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for waste management services (waste_opt_cost)	1: Forecast RPI; 2: Some % each year	1

	Method for projecting growth in demand for waste management services (waste_opt_demand)	1: Growth in number of households; 2: Growth in number of households, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for waste management services (waste_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for waste management services (waste_opt_pct_cost)	%	0
	Percentage increase in demand for waste management services (waste_opt_pct_demand)	%	0
	Percentage increase in employee costs for waste management services (waste_opt_pct_empl)	%	0
	Percentage increase in running costs for waste management services (waste_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from waste management services (waste_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for waste management services (waste_opt_pct_w_runn)	%, 0 to 100	60

	Method for projecting growth in running costs for waste management services (waste_opt_runn)	1: Forecast RPI; 2: Forecast increase in average earnings; 3: Weighted average of RPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from waste management services (waste_opt_sfcsothinc)	1: Forecast RPI; 2: Some % each year	1
Other environmental and regulatory services	Level of detail for projections of net spending on environmental and regulatory services (envreg_detail_opt)	1: Net spending; 2: Separate elements	2
	Method for projecting growth in overall costs for environmental and regulatory services (envreg_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for environmental and regulatory services (envreg_opt_demand)	1: Growth in population (all ages); 2: Growth in population (all ages), plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for environmental and regulatory services (envreg_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for environmental and regulatory services (envreg_opt_pct_cost)	%	0

	Percentage increase in demand for environmental and regulatory services (envreg_opt_pct_demand)	%	0
	Percentage increase in employee costs for environmental and regulatory services (envreg_opt_pct_empl)	%	0
	Percentage increase in running costs for environmental and regulatory services (envreg_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from environmental and regulatory services (envreg_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for environmental and regulatory services (envreg_opt_pct_w_runn)	%, 0 to 100	60
	Method for projecting growth in running costs for environmental and regulatory services (envreg_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from environmental and regulatory services (envreg_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
	Level of detail for projections of net spending on fire, central and other services (oth_detail_opt)	1: Net spending; 2: Separate elements	2

Fire, central and other services	Method for projecting growth in overall costs for fire, central and other services (oth_opt_cost)	1: Forecast increase in the GDP deflator; 2: Some % each year	1
	Method for projecting growth in demand for fire, central and other services (oth_opt_demand)	1: Growth in number of households; 2: Growth in number of households, plus or minus some %; 3: Some % each year	1
	Method for projecting growth in employee costs for fire, central and other services (oth_opt_empl)	1: Forecast increase in average earnings; 2: Some % each year	1
	Percentage increase in overall costs for fire, central and other services (oth_opt_pct_cost)	%	0
	Percentage increase in demand for fire, central and other services (oth_opt_pct_demand)	%	0
	Percentage increase in employee costs for fire, central and other services (oth_opt_pct_empl)	%	0
	Percentage increase in running costs for fire, central and other services (oth_opt_pct_runn)	%	0
	Percentage increase in sales, fees and charges and other income from fire, central and other services (oth_opt_pct_sfcsothinc)	%	0
	Weight placed on general price increases rather than earnings growth in growth of running costs for fire, central and other services (oth_opt_pct_w_runn)	%, 0 to 100	60

	Method for projecting growth in running costs for fire, central and other services (oth_opt_runn)	1: Forecast CPI; 2: Forecast increase in average earnings; 3: Weighted average of CPI and earnings growth; 4: Some % each year	3
	Method for projecting growth in sales, fees and charges and other income from fire, central and other services (oth_opt_sfcsothinc)	1: Forecast CPI; 2: Some % each year	1
Spending Projections – Non-service spending			
Commercial activities and investments	Commercial and other spending lines to include (commcl_selected_sp)	List: provision for repayment of principal; interest payable	None
	Overwrite projected commercial spending for selected council with own figures (overwrite_commcl_sp_projections)	TRUE or FALSE	FALSE
Waste and transport levies	Waste and transport authority levies to include (levies_selected)	List: integrated transport authority levy; waste disposal authority levy	All
Funding System Reforms – Business rates resets			
Business rates resets	Select pattern of business rates resets (select_reset_type)	1: No resets; 2: Full resets only; 3: Partial resets; 4: Phased (rolling) resets	1
	Year of initial full reset (firstreset_year)	Range: 2024 to 2035	2025

	If full resets only, select the number of years between full resets after the first (reset_onlyfull_freq)	Number	5
	Number of years between partial resets (reset_partial_freq)	Number	5
	The share of growth of revenues that is redistributed after a partial reset (reset_partial_pct_grow)	%, 0 to 100	50
	The share of loss of revenues that is redistributed after a partial reset (reset_partial_pct_loss)	%, 0 to 100	100
	If partial resets, select to also include intermittent full resets (reset_partialfull_on)	TRUE or FALSE	TRUE
	If partial resets, select the number of years between full resets (reset_partialfull_freq)	Number	15
	If phased resets, select the number of years an authority can retain growth or losses (reset_phased_freq)	Number	5
Funding System Reforms – Business rates system			
Timing of reforms	Include the impact of changes to the business rates retention system (include_brrs_change)	TRUE or FALSE	FALSE
	Year new business rates retention scheme takes effect (newscheme_year)	Range: 2024 to 2035	2025
Retention, safety net and levies	Rate of retention under new scheme (retention2)	%, 0 to 100	50
	Include safety net in the new system (safetynet_on)	TRUE or FALSE	TRUE
	Safety net threshold in new system as % of baseline funding (safetynet_newsys)	%, 0 to 100	92.5

	Proportion of compensation provided for shortfall below safety net threshold (safetynet_newsys_propn)	%, 0 to 100	100
	Include levy in the new system (levy_newsys_on)	TRUE or FALSE	TRUE
	Select type of levy in the new system (levy_newsys_opt)	1: As now, with the current levy rate; 2: Cap on growth, applied above some multiple of baseline funding	2
	Levy cap in new system as % of baseline funding (levy_newsys)	%, 100 to 500	150
Tier shares	Provide own tier shares for each type under new system (overwrite_tiershares)	TRUE or FALSE	FALSE
Funding System Reforms – Fair Funding Review			
Options not yet included, but will be updated to allow you to consider the impact of changes to how funding needs and revenue-raising capacity are assessed and accounted for in the local government funding system. This may also include the impact of potential transitional protection arrangements.			
Economic Forecasts			
Inflation	Adjust inflation forecasts by some percentage points (inflation_growth_pct)	percentage points	0
	Overwrite forecasts for inflation with own figures (overwrite_inflation_projections)	TRUE or FALSE	FALSE

Population and household projections	Select variant to use for projected population (popn_projection_option)	1: Principal projection (default); 2: High international migration; 3: Low international migration; 4: Alternative internal migration; 5: 10-year migration	1
	Select variant to use for household projections (hh_projection_option)	1: Principal projection (default); 2: High international migration; 3: Low international migration; 4: Alternative internal migration; 5: 10-year migration	1
Average earnings growth	Set annual earnings growth after 2026–27 (earnings_growth_pct)	%	3
	Adjust average earnings forecasts from 2022–23 by some percentage points (earnings_growth_adj)	percentage points	0
	Overwrite forecasts for average earnings with own figures (overwrite_earnings_projections)	TRUE or FALSE	FALSE

C. Calculation details

This appendix provides information on the various calculations used in projecting revenues and spending forwards.

C.1 Service spending projections

Spending on each service is projected forward on the basis of assumed changes in demand (the number of units of the service that are to be provided) and costs (the costs per unit of provision). In general, spending on a given service is given by

(1) $$Spending_t = Spending_{t-1} \times (1 + Demand\_growth_t) \times (1 + Cost\_growth_t)$$

where, for instance, $Demand\_growth_t = 0.01$ if growth in demand is assumed to be 1% a year.

$Demand\_growth_t$ is, by default, assumed to be related to growth in population or household numbers. For most services, the default assumption is that demand will simply increase in line with the proportional change in forecast population or household numbers. For social care services, the default assumption is that demand will grow faster than population: by 1 percentage point more in the case of children's social care services and by an additional council-specific factor in the case of adult social care services. These council-specific projections are based on national-level demand projections for adult social care for those aged 18–64, and 65 and over, produced by the Personal Social Services Research Unit. We have scaled these for individual areas based on the difference between local and national principal population projections for these age groups, and the proportion of adult social care spending in each area assigned to each age group in 2019–20.

$Cost\_growth_t$ is, by default, assumed to vary for labour costs, running costs and income from sales, fees and charges (which is netted off gross spending to calculate net spending): labour costs are assumed to grow in line with average earnings; running costs by a weighted average of average earnings and inflation; and sales, fees and charges in line with inflation. To allow this, formula (1) is calculated separately for labour costs, running costs and income from sales, fees and charges, using the same demand assumptions for each but different cost assumptions. Projections for each component of net spending are then summed to produce projections for net spending.

C.2 Council tax revenue projections

Council tax revenue projections rely on assumptions about changes in tax rates, the tax base and the collection rate. Council tax revenues are calculated as

(2) $$Revenue_t = BandDRate_t \times (Taxbase_{t-1}) \times (1 + TaxbaseGrowth_t) \times (CollectionRate_t / CollectionRate_{t-1})$$

where $BandDRate_t = \max\{BandDRate_{t-1} \times (1 + max\_percent\_incease_t),$ $BandDRate_{t-1} + max\_cash\_increase_t)\}$.

C.3 Grant funding projections

The simplest type of projection is to apply the same percentage change to each council's grant, holding the shares of the grant allocated to each council fixed:

(3) $$Grant_t = Grant_{t-1} \times Perc\_Change\_Grant_t$$

However, the model incorporates a number of more complex allocation methods for certain grants.

Allocation in line with relative needs formulas or assessed spending needs

For some grants, we allow for the total value of the grant to be redistributed amongst councils based on their share of some measure of need:

(4) $$Grant_t = \sum Grant_t \times (Share\_of\_need / \sum Share\_of\_need)$$

where $\sum Grant_t$, the total value of the grant across all authorities, is projected forwards based on the same $Perc\_Change\_Grant_t$.

For social care grants, another option allows you to roll funding over and allocate only increases in line with needs measures:

(5) $$Grant_t = Grant_{t-1} + [(\sum Grant_t - \sum Grant_{t-1}) \times (Share\_of\_need / \sum Share\_of\_need)]$$

Allocations that account for assessed spending needs and revenue-raising capacity

Some grants relating to social care can be allocated in line with adult social care relative needs formulas, but accounting for the amount each council is projected to be able to raise through the adult social care precept:

(6) $$Funding\_need_t = (\sum Grant_t + \sum ASCprecept_t) \times (Share\_of\_need / \sum Share\_of\_need)$$

(7) $$Initial\_share_t = \max\{Funding\_need_t - ASCprecept_t, 0\}$$

(8) $$Grant_t = Initial\_share_t \times (\sum Grant_t / \sum Initial\_share_t)$$

where $ASCprecept_t$ is the total notional amount a council is projected to be able to raise, based on assumed growth in the council tax base and assuming that each council has raised the ASC council tax precept by the full amount allowed in each year since 2023–24.

Calculating an alternative ‘minimum funding floor’

You can model the impact of a ‘minimum funding floor’ in future years, which guarantees all councils core spending power each year at some percentage ($Floor\_trigger$) of their core spending power the previous year:

(9) $$Funding\_floor\_grant_t = \max\{(CoreSpendingPower_{t-1} \times Floor\_trigger) - CoreSpendingPower_t, 0\}$$

where $CoreSpendingPower_t$ is the sum of: projected council tax revenues; all grants (excluding public health grant, but including any new, custom grants); section 31 grants for underindexation; and the council’s baseline funding level under 50% business rates retention. Note that this measure of grant income also includes $Funding\_floor\_grant_{t-1}$, so the damping mechanism applies to past damping.

C.4 Business rates revenue modelling

The modelling of the business rates retention system and reforms to this system is currently the most complex part of the IFS–CIPFA Local Government Finance Model.

The first stage of projecting forward retained business rates revenues is to project forward the local share of business rates income, the local share of the cost of reliefs to be added back when calculating business rates income for the purpose of calculating levy and safety-net payments, and section 31 grants to compensate councils for the cost of newly introduced reliefs.

(10) $Value_t = Value_{t-1} \times (1 + TaxbaseGrowth_t) \times (Multiplier_t / Multiplier_{t-1})$

The value of section 31 grants provided to compensate for underindexation of the business rates multiplier is calculated as

(11) $S31\_underindex_t = S31\_underindex_{t-1} \times (1 + TaxbaseGrowth_t) \times (Multiplier_t / Multiplier_{t-1}) \times (underindex\_factor_t / underindex\_factor_{t-1})$

where $underindex\_factor_t = (Multiplier\_Alt_t - Multiplier_t)/Multiplier_t$ and $Multiplier\_Alt_t$ is what the multiplier would be if there had been no underindexation.

Calculating updated baselines, tariffs, top-ups and associated adjustments in years when there is no reset

In years in which there are no resets, business rates baselines, baseline funding levels, and tariffs and top-ups for councils that are not piloting higher rates of rates retention increase in line with the business rates multiplier.

(12) $Value_t = Value_{t-1} \times (Multiplier_t / Multiplier_{t-1})$

For councils piloting higher rates retention, this equation is applied to the value of baseline funding excluding grants that are rolled into the rates retention system as part of piloting arrangements. Actual baseline funding levels are then calculated by adding on the projections of the values for these rolled-in grants, and the tariff (or top-up) calculated as the difference between a council's uprated business rates baseline and baseline funding level.

Adjustments to tariffs and top-ups to account for underindexation of the business rates multiplier are calculated as

(13) $Adjustment_t = Tariff\_or\_TopUp_t \times underindex\_factor_t$

where for pilot councils, the tariffs and top-ups used to calculate these adjustments are those that would apply if the grants rolled in as part of the piloting arrangements were not rolled in.

Calculating updated baselines, tariffs, top-ups and associated adjustments in years when there is a full reset

When the business rates system is subject to a full reset, business rates baselines (BRBs) and baseline funding levels (BFLs) associated with tariffs and top-ups are recalculated to redistribute growth in retained rates revenues since the last reset. The new business rates baseline is calculated as

(14) $BRB_t = (rates\_income + relief\_addbacks)_{t-1} \times \left(\frac{Multiplier_t}{Multiplier_{t-1}}\right) \times tiershare_t$

In other words, the new business rates baseline is equal to the prior year's business rates income after adjusting for reliefs added back in, multiplied by the change in the multiplier, and the council's local share of business rates.

In order to calculate the new baseline funding levels, the amount of growth to be redistributed from the last reset period first needs to be calculated:

$$(15) \qquad \sum redist_t = \sum \left[NDR_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}} \times tiershare_{t-1} \right] - \sum \left[BRB_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}} \right]$$

where $NDR_{t-1} = (rates\_income + relief\_addbacks)_{t-1}$.

Currently the model redistributes this growth in line with councils' existing shares of baseline funding, excluding any rolled-in grants:

$$(16) \qquad BFL_t = \left[BFL_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}} \right] + \left[\frac{BFL_{t-1}}{\sum BFL_{t-1}} \times \sum redist_t \right]$$

In practice, a reset may be accompanied by a reassessment of the relative funding needs of different areas, which would mean a fuller updating of baseline funding levels. The model will be updated to account for any recalculation of baseline funding levels when details are published.

Tariffs, top-ups and associated adjustments are calculated as above from these updated baselines.

Calculating updated baselines, tariffs, top-ups and associated adjustments in years when there is a partial reset

Under a partial reset, growth relative to existing business rates baselines is only partially redistributed at a reset. This means the model must calculate growth relative to baseline for each council.

$$(17) \qquad growth\_NDR_t = NDR_{t-1} - \frac{BRB_{t-1}}{tiershare_{t-1}}$$

The percentage of the change in rates income relative to baseline that is redistributed is allowed to vary for councils recording growth or decline:

$$(18) \qquad redist\_pct_t = \begin{cases} redist\_pct\_loss \; if \; growth\_NDR_t \leq 0 \\ redist\_pct\_gain \; if \; growth\_NDR_t > 0 \end{cases}$$

The change in a council's business rates baseline is then

$$(19) \qquad change\_BRB_t = growth\_NDR_t \times redist\_pct_t \times \frac{Multiplier_t}{Multiplier_{t-1}} \times tiershare_t$$

and the new business rates baseline is therefore

(20) $$BRB_t = \left[BRB_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}} \times \frac{tiershare_t}{tiershare_{t-1}}\right] + change\_BRB_t$$

The new baseline funding levels are calculated based on a variant of equation (19) that uses old tier shares rather than any new tier shares. This is to avoid councils seeing windfall gains or losses if the tier share changes at the same time as the business rates system is partially reset.

(21) $$redist_t = growth\_NDR_t \times redist\_pct_t \times \frac{Multiplier_t}{Multiplier_{t-1}} \times tiershare_{t-1}$$

and then baseline funding levels are calculated as

(22) $$BFL_t = \left[BFL_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}}\right] + \left[\frac{BFL_{t-1}}{\sum BFL_{t-1}} \times \sum redist_t\right]$$

Calculating updated baselines, tariffs, top-ups and associated adjustments in years when there is a phased reset

Under a phased reset, each year's growth (or loss) is retained for a specific number of years – the 'cycle length'. Once this cycle length has been reached for the first year for which the phased resets are in operation, growth in the first year of the cycle is redistributed. The cycle then moves forward one year, and the following year growth in the next year is redistributed. And so on.

Let $tref = t - cycle\_length$. The change in business rates revenues in year *tref* to be redistributed at time *t* is calculated as

(23) $$growth\_NDR\_redist_t = \left[NDR_{tref} - \left(NDR_{tref} \times \frac{Multiplier_{tref}}{Multiplier_{tref-1}}\right)\right] \times \frac{Multiplier_t}{Multiplier_{tref}} \times tiershare_t$$

This means that the updated business rates baseline is

(24) $$BRB_t = \left[BRB_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}} \times \frac{tiershare_t}{tiershare_{t-1}}\right] + growth\_NDR\_redist_t$$

The baseline funding is calculated using a version of formula (23) that is based on the old tier share, so that the phased reset does not lead to windfall gains or losses if tier shares change over time:

(25) $$redist_t = \left[NDR_{tref} - \left(NDR_{tref} \times \frac{Multiplier_{tref}}{Multiplier_{tref-1}}\right)\right] \times \frac{Multiplier_t}{Multiplier_{tref}} \times tiershare_{tref}$$

And the new baseline funding levels are calculated as

(26) $$BFL_t = \left[BFL_{t-1} \times \frac{Multiplier_t}{Multiplier_{t-1}}\right] + \left[\frac{BFL_{t-1}}{\sum BFL_{t-1}} \times \sum redist_t\right]$$

Sharing out surpluses from business rate pooling arrangements

Councils are able to pool their business rates revenues, in which case tariffs, levies and safety nets are applied at the pool level, using aggregate measures of business rate baselines, baseline funding levels and pre-tariff rates income for all members of the pool.

(27) $$Afterlevy\_income_{pool} = Pretariff\_income_{pool} - Tariff_{pool} - Levy\_payment_{pool}$$

(28) $$Safetynet\_payment_{pool} = \max\{[(Safetynet\_threshold \times BFL_{pool}) - Afterlevy\_income_{pool}], 0\}$$

(29) $$Rates\_income_{pool} = Afterlevy\_income_{pool} + Safetynet\_payment_{pool}$$

This estimate of the aggregate retained business rates income for all members of a pool is then compared with the income each council would receive in the absence of pooling, to estimate the surplus (or deficit) from pooling.

(30) $$Whole\_pool\_surplus = Rates\_income_{pool} - \sum Rates\_income_{nopool}$$

This pool surplus is then shared out between the councils in the pool according to a weighted average of a council's above-baseline growth and baseline funding level.

(31) $$Share\_of\_pool\_surplus_t = Whole\_pool\_surplus_t \times \{(Proportion \times \frac{Positive\_growth_t}{Positive\_growth_{pool}}) + [(1 - Proportion) \times \frac{BFL_t}{BFL_{pool}}]\}$$

where $Positive\_growth_t = \max\{Afterlevy\_income_{nopool} - BFL_t, 0\}$ and $Proportion$ is the proportion of growth shared out in proportion to each council's above-baseline growth, as opposed to their funding baselines. Note that $Positive\_growth_{pool}$ and BFL_{pool} are the sum of above-baseline growth and of baseline funding levels over councils in a specific pool.

D. Model updates

This appendix provides information on the changes made in each update to the model, since the initial release (Version 1.0.0, 28-06-2022). This can also be found on the ‘Release Notes’ page of the model.

Version 1.0.1, 06-07-2022

1. **Surpluses on the levy account.** Added the option to include payments from the levy account in future years if the levy account is in surplus at the end of the previous financial year. This is not included in our measure of retained business rates income by default, but can now be added in on the 'Revenue Projections > Business rates revenues' page and is available as a separate line item on the 'Download Full Results' page.
2. **Council tax levels.** Added text on the 'Revenue Projections > Council tax' page, detailing the implied band D council tax level for the selected authority in 2025-26 under the current assumptions. Changed controls to allow users to model the impact of small decreases in council tax levels in future years.
3. **Downloading results.** Added buttons to Select / Deselect all line items relating to revenues and spending on the 'Download Full Results' page. Fixed a bug which meant the download would not work if the user selected to include parish precepts in the download.
4. **Business rates in Somerset.** Corrected business rate calculations relating to Somerset West and Taunton, which was not previously being picked up as a billing authority of Somerset County Council due to an error in the input data. This means a slight increase in estimated retained business rate revenues for Somerset County Council (from 2019-20 onwards), and a slight decline for Somerset West and Taunton (from 2019-20 onwards) and for other billing authorities in Somerset (between 2019-20 and 2022-23 only).
5. **User guide and interface.** Updated User Guide and explanatory text within the interface to reflect the changes made. Both have now been copy edited.

Version 1.0.2, 13-08-2022

1. **Budget data for 2022-23.** Added in budget data for 2022-23, which DLUHC published on 21-07-2022. This is used for estimates of spending in 2022-23, and can be used as the basis of spending projections. Note data is missing for 8 authorities.
2. **Revised outturn data for 2019-20.** Updated to use revised version of outturn spending data for 2019-20, which includes data which was initially missing for some authorities. The revision affects: Ealing, East Riding of Yorkshire, Hambleton, Knowsley, Lambeth and Redbridge.
3. **Inflation.** Slight changes made to assumptions around inflation to reflect 'HMT GDP Deflators - June 2022' and 'OBR Fiscal risks and sustainability report - July 2022'. These mean a slight revision to the GDP deflators used in historical years, and a lower long-term forecast for RPI of 2.0% a year is used after the end of the OBR's forecast period (instead of 2.9%).
4. **User guide and interface.** Updated User Guide and explanatory text within the interface to reflect the changes made.

Version 1.0.3, 15-09-2022

1. **Waste and transport levies.** Changed the way spending on waste and transport levies is projected forwards between 2022-23 and 2023-24. This is now based on the average change in projected net spending on the relevant service area (waste management or highways and transport) for all main councils, instead of the change in each specific council area. This produces a smoother projection for levies, and fixes a particular issue for some councils (Manchester and Newcastle-upon-Tyne) where the previous method produced implausible results for net spending. After 2023-24, levies are still assumed to change in line with projected net spending in each council area.

Version 1.0.4, 28-10-2022

1. **Provisional outturns for 2021-22.** Updated to use data from provisional outturns for 2021-22 where available. Where 2021-21 is used as the baseline year for spending projections, it is now possible to project forwards different elements of net spending separately. For the 80 councils where data is missing from published outturns, data from 2021-22 budgets is used, and only net spending on each service can be used in spending projections with a 2021-22 baseline.
2. **More intuitive inflation upload.** If selecting to download and overwrite forecasts for inflation and earnings growth, these should now be entered as a percentage point growth each year, which feedback from users suggested would be more intuitive than the previous approach (indexing levels to a single year).
3. **Inflation page format.** Re-arranged format of 'Economic Forecasts' page to combine tabs on inflation and earnings growth, and include both on the chart. Note that when projecting elements of net spending separately, it is important to consider sensitivity to both of these drivers together. By default, income in relation to some services is assumed to rise in line with CPI, so that increasing inflation forecasts without amending average earnings growth can lead to forecasts for fall in net spending for some services, for some councils.
4. **Inflation.** Amended long-term forecast for RPI inflation to the previous September from 2.9% to 2.0%, to match the long-term forecast for RPI.

Version 1.0.5, 09-12-2022

1. **Revised outturns for 2020-21.** Updated to use revised version of outturn spending data for 2020-21, which includes data which was initially missing for some authorities. The revision affects: Cannock Chase, Corby, East Northamptonshire, Medway Towns, North Warwickshire, Nuneaton and Bedworth, Reading, Slough and Surrey Heath.
2. **Economic forecasts.** Updated to use forecasts for inflation (CPI, RPI and GDP deflator) and average earnings growth from the OBR Economic and Fiscal Outlook - November 2022.
3. **Council tax levels.** Changed default assumption to be that council tax levels will increase in future years in line with referendum limits announced for 2023-24. This implies faster growth in revenues after 2022-23.
4. **Council tax base growth.** Updated to use data from Council Taxbase 2022 statistics, so that projections can be based on average growth between years up to 2022.
5. **Imputing missing spending data.** Now imputing missing data for some councils where budgets or outturns are missing in specific years. This affects: Isles of Scilly in 2016-17; Bromsgrove and Redditch in 2020-21; Eden and Medway Towns in 2021-22; and 8 councils in 2022-23. These are: Amber Valley; Nuneaton and Bedworth; Preston; Slough; South Lakeland; Southwark; Tamworth; and Warwick.

6. **Groups of councils.** Added functionality to look at results for aggregates of councils, by council type or by region. This also includes result for all councils in England. This is on a new 'Groups of councils' page.
7. **Sales, fees and charges in 2022-23.** If projecting income from sales, fees and charges and other income separately, and basing growth on forecast inflation, this would have assumed that levels of fees and charges were increased in 2022-23 very significantly. Instead, the default is not for these income sources to increase in 2022-23 in line with demand growth and the forecast for CPI in 2022-23 in the OBR's October 2021 Economic and Fiscal Outlook. This implies a more realistic increase of 3.7%.
8. **Delay to social care reforms.** Changed default to include funding for adult social care reforms in our measure of grants income, as the delay to reforms means this funding will now be available to support councils' existing services. By default, this funding is assumed to continue after 2024-25, although this assumption can be changed.
9. **Additional funding for social care.** Added in new grant funding for social care in 2023-24 and 2024-25 which was announced at the Autumn Statement 2022. This is assumed to be directed through the Improved better care fund, and to continue after 2024-25. By default, funding earmarked as being provided through the 'Better Care Fund' is not included, although this option is available.
10. **Other grant funding in 2023-24 and 2024-25.** Based on announcements made at the Autumn Statement 2022, the value of most grants to local government are assumed to be fixed in cash terms for the next two years. This includes: revenue support grant, rural services delivery grant, social care grants, one-off services grant, and New Homes Bonus. Public health grant is still assumed to increase with the forecast GDP deflator.
11. **Health and social care levy.** Reduced one-off services grant in 2023-24 (and implicilty future years) by £200 million, to approximate the clawback of funding which had been expected to reimburse the costs of the health and social care levy, which is no longer going ahead.

Version 1.1.0, 20-01-2023

1. **Council tax levels.** Added option to assume that council tax referendum limits change in some future year.
2. **Final outturns for 2021-22.** Updated to use data on from final spending outturns for 2021-22 where available. This is in place of data from provisional outturns, or budgets.
3. **NNDR3s for 2021-22.** Updated to reflect data from NNDR3s on business rates collected in 2021-22, instead of using forecasts (NNDR1s). This also means business rate revenues now reflect some reliefs legislated for after NNDR1s were published.
4. **Grant funding.** Updated to reflect the provisional local government finance settlement, which includes actual grants within core spending power in 2023-24. Grants in 2024-25 and future years reflect the local government finance policy statement, and the Autumn Statement 2022, with significant changes made to the options available. Rolled in grants are now included in the years up to 2022-23. Added option below chart of grant income projections to download data for all councils.
5. **Business rate pilots and pools.** Pilots and pooling arrangements in 2023-24 reflect the provisional local government finance settlement 2023-24 and are always in effect in that year. In future years, pilots remain turned on by default, and pooling arrangements off, but the default arrangements copied are now those from 2023-24.
6. **Compensation for under-indexation and the multiplier.** In 2023-24 and future years, default changed to compensation for under-indexation relative to CPI rather than RPI. We restrict the change in the multiplier to never be negative, despite the latest forecast being for slightly negative CPI in 2025-26.

7. **Local authority reorganisation.** Updated to reflect local authority reorganisation that will take place in April 2023, so projections for 2023-24 onwards are now available for newly created councils.
8. **Calculation of ASC precept for grant equivalisation.** Where selecting to model grants in future years to equivalise against the ASC CT precept, this precept is increased from actual levels of ASC precepts in 2022-23, rather than modelled assuming maximum uptake of allowed precepts since they were introduced.

Version 1.1.1, 07-02-2023

1. **Final settlement for 2023-24.** Updated to reflect changes between provisional and final local government finance settlement. This affects some grant funding - £10 million more RSDG, £19 million more Services Grant, minor changes to NHB allocations, and £3 million less through the funding guarantee. Business rate pooling arrangements for 2023-24 have also been revised between the provisional and final settlements.
2. **Additional CT flexibilities in 2023-24.** Added option, turned on by default, to assume that Thurrock, Slough and Croydon councils make use of additional flexibilities to raise CT levels above normal referendum principles in 2023-24, as agreed as part of the final settlement.
3. **Surpluses on the levy account.** Added the allocations of payments from the levy account in 2023-24, totalling £100 million. These payments are added into councils' retained business rates income. In future years, you can select to distribute future surpluses on the 'Revenue Projections > Business rates revenues' page, although this remains turned off by default.
4. **Results on a per household basis.** Added option to display results on charts on a per-household basis, which feedback from some users suggested would be a helpful complement to the aggregate and per-capita options.
5. **User guide.** Updated User Guide to reflect all changes made since Version 1.0.2.

Version 1.1.2, 16-03-2023

1. **Economic forecasts.** Updated to use forecasts for inflation (CPI, RPI and GDP deflator) and average hourly earnings growth from the OBR Economic and Fiscal Outlook - March 2023.
2. **NNDR1s for 2023-24.** Updated to reflect forecasts for business rates collected in 2023-24, and actual business rates baselines and baseline funding levels for 2023-24, which reflect the impact of revaluation. Also updated to reflect revised NNDR3s for 2021-22 and NNDR1s for 2022-23.
3. **Public health grant.** Updated to reflect actual allocations of public health grant in 2023-24, and indicative allocations for 2024-25, which were published on 14 March 2023.
4. **Groups of councils.** Added line chart showing all revenues or spending of a set of groups over time, and the option to view results for areas by quintile of area deprivation (based on IMD2019).
5. **Council tax base data.** Updated to reflect revised council tax base data for 2022-23.
6. **Financial years.** Amended labelling of chart axes to clarify which financial year results relate to.

Version 1.1.3, 18-09-2023

1. **Council tax levels.** Updated to use actual council tax levels set by councils in 2023-24.

2. **Budget data for 2023-24.** Updated to use data from councils' budget data (RA forms) for 2023-24, for council spending as well as items such as transport and waste levies, and commercial income.
3. **Baseline year for spending projections.** Data from 2023-24 budgets are now used by default as the basis for spending projections. Previously 2019-20 was the default, as this was the last pre-COVID year.
4. **Revised outturn data for 2021-22.** Updated to use revised final outturn data from RO forms for 2021-22, which has less missing data. This is used in place of budget data for 13 councils.
5. **NNDR3s for 2022-23.** Updated to reflect data from NNDR3s on business rates collected in 2022-23, instead of using forecasts (NNDR1s).
6. **Price year for real-terms figures.** Results in real-terms are now expressed in 2022-23 prices, instead of 2021-22.
7. **Fixing issues downloading data.** Fixed a bug which was preventing the download of data for editing and re-upload in relation to council tax base and business rates tax base growth.
8. **Levy account surpluses.** If selecting to include payments from the levy account in future years if the levy account is in surplus at the end of the previous financial year, this is added into our measure of retained business rates income. Previously a bug meant this was not being added in properly in future years.
9. **User guide.** Updated User Guide to reflect all changes made since Version 1.1.1.