

Local Government Reorganisation

DCN analysis of existing unitary councils: bigger isn't better

October 2025

1. Summary

Context

- Much of the rationale for LGR in the English Devolution White Paper rested on the assumption that bigger councils benefit from economies of scale and hence are more financially stable, efficient and effective.
- Financial effectiveness is one of the six assessment criteria for final LGR proposals: “*Unitary local government must be the right size to achieve efficiencies, improve capacity and withstand financial shocks*”.
- MHCLG has indicated that 500k population will be a guideline for new unitary councils. It is not a minimum threshold. But the expectation is that the new unitary councils created in 2027 and 2028 will have an average population size of around 500k and that some new councils will be larger.
- DCN has carried out new analysis to examine whether population size is linked to value for money and whether there is a sound basis for setting 500k as the guideline population level.

National context: the guideline size of new councils is well above the typical size of existing unitary councils

Number of current councils by population range

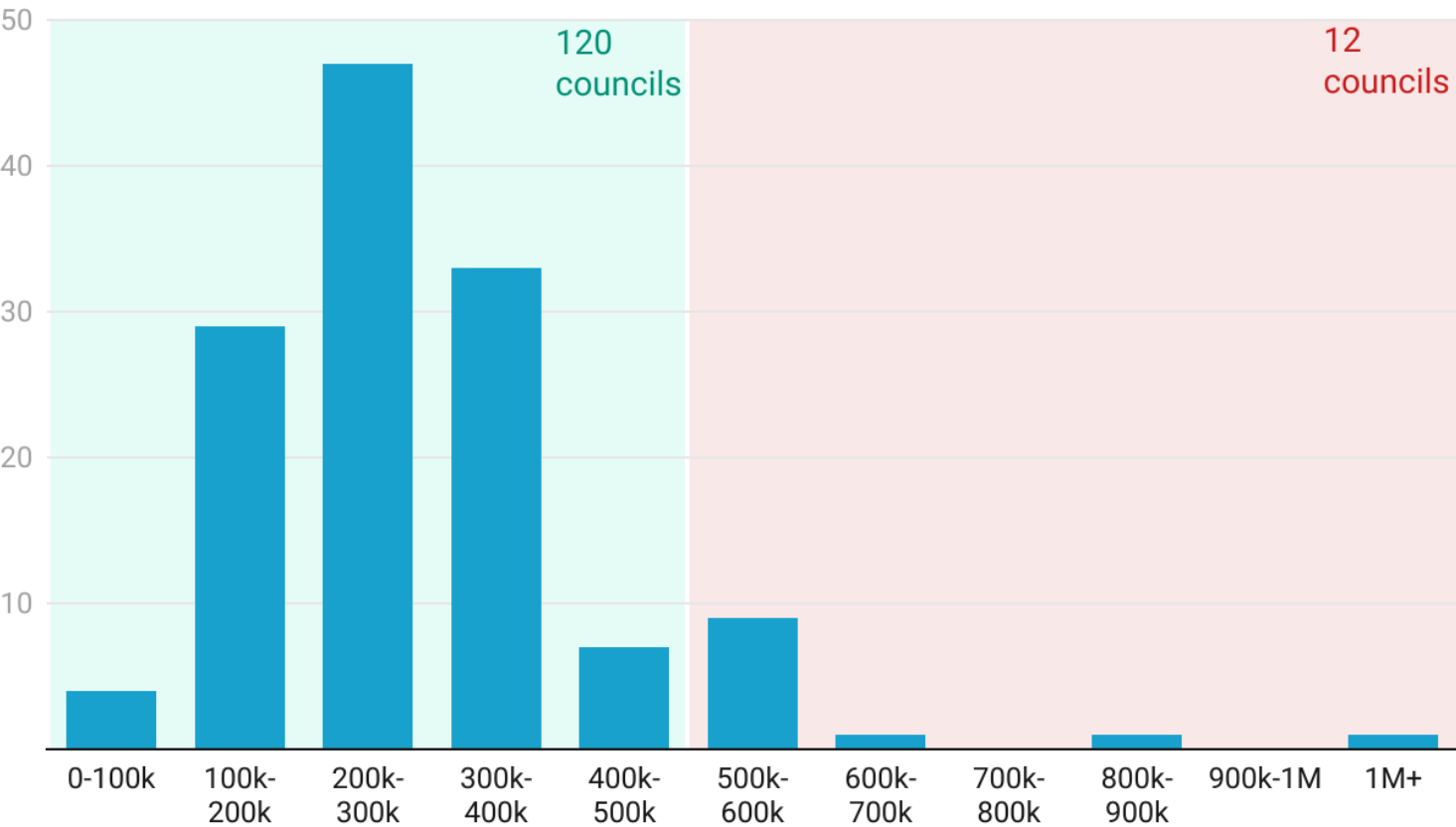
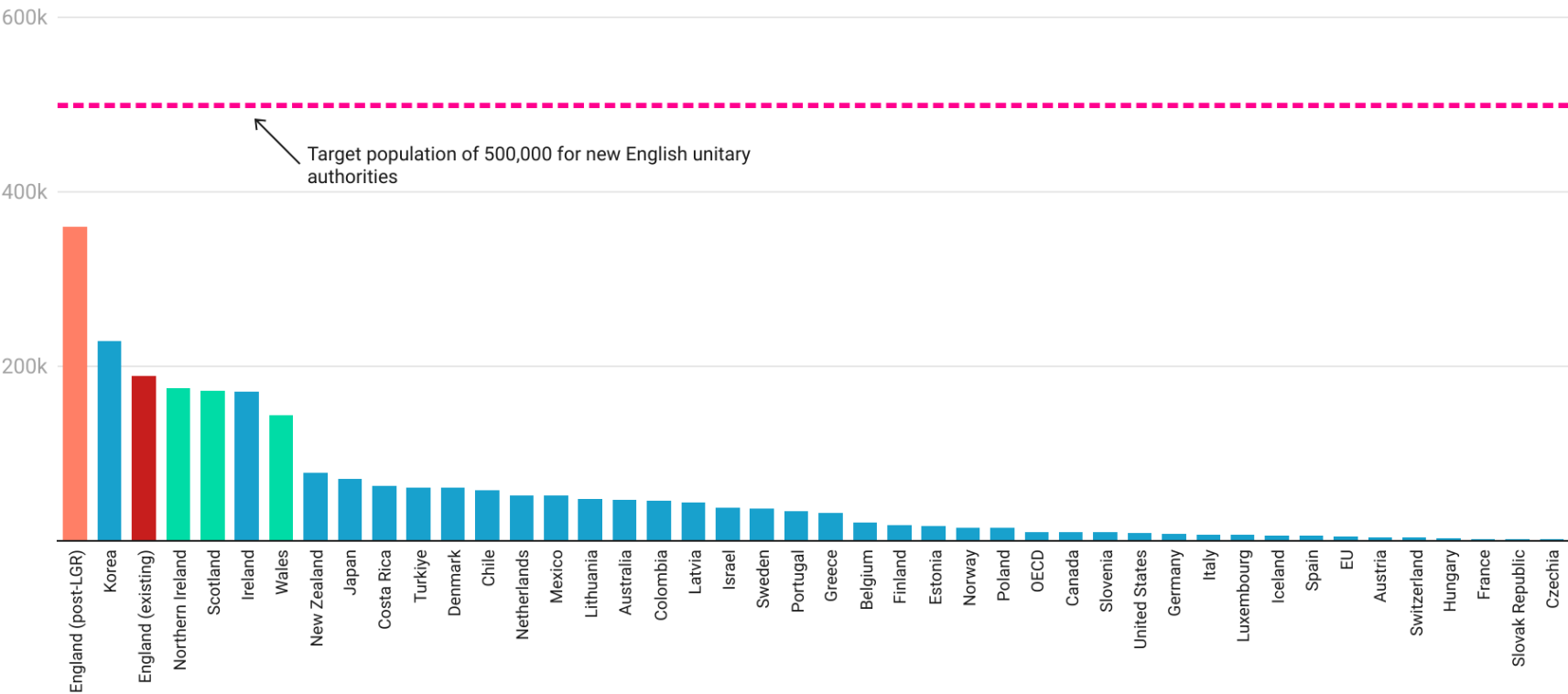


Chart: DCN • Source: LG Inform • Created with Datawrapper

International context: England already has unusually large councils by international standards

Average municipal size by number of inhabitants - OECD countries

Creating councils of at least 500,000 residents in areas covered by local reorganisation would make England a notable outlier amongst rich countries



The figures for the UK were calculated by the DCN using figures from the OECD and ONS. The post-LGR figures are based on there being 161 remaining municipalities in England.

Chart: DCN • Source: OECD • Created with Datawrapper

Hypothesis

If larger councils benefited from economies of scale – which substantially outweigh any diseconomies - up to and beyond a population of 500k, we would expect to see some combination of the following effects:

- Larger councils spend less per resident
- Larger councils are more financially stable
- Larger councils charge lower council tax
- Larger councils deliver better services

Our analysis tests each of these four aspects to establish whether the evidence supports the hypothesis

Methodology

- The analysis compares all 132 unitary local authorities in England. It excludes county councils and district councils. It uses published data, primarily taken from LG Inform Plus, the local area benchmarking tool from the Local Government Association.
- Data is the latest available data as of 30 September 2025.
- Analysis is based purely on real-world historic data rather than making assumptions about future spending and performance.
- Population data is for number of people ordinarily resident in the local authority area.
- The analysis controls for factors other than population where possible to test whether any apparent correlation between population size and outcomes is causal.
- *Note: for the remainder of this briefing, “council” refers to unitary councils unless otherwise stated.*

Headline conclusions

1. There is little or no evidence to support the Government's preference for large unitary councils and no evidence to support the 500k population level.
2. The bulk of the data analysed show a non-existent or faint relationship between a council's population and its outcomes.
3. When there is an apparent link between population size and outcomes, it more often favours smaller councils.
4. The evidence gives no reason to assume that smaller unitary councils will be less efficient, sustainable or effective due to their size.

Detailed conclusions

1

Total expenditure per resident

- 8 of the 10 lowest spending councils have a population lower than the median population of existing unitary councils.
- Evidence for a causal link between council size and spend per resident is very weak. Other factors, such as deprivation, are much more significant in predicting spending efficiency.
- Correlation between population size and spend per resident is weak. In the largest 90% of unitary councils (starting at population size of 157k) the relationship is so minimal as to be essentially non-existent.
- To the extent that there is a correlation, there appears to be a tipping point at around 350k population: the direction of the relationship changes such that councils above this threshold typically spend more per resident than those below it.

2

Financial sustainability

- Larger councils appear to have been more likely to experience financial instability that is sufficiently serious to require Exceptional Financial Support (EFS).
- Larger councils have required more EFS relative to the size of their budgets than smaller councils.
- Analysis does not demonstrate that population size is the key driver of this outcome. Equally, there is no evidence that smaller councils are likely to be less financially stable than larger ones.

Detailed conclusions

3

Council tax

- Larger councils charge higher levels of council tax. The average Band D council tax bill for councils larger than 500k population was £250 higher than the average bill for councils smaller than 500k.
- Analysis does not demonstrate that population size is the key driver.
- Council tax levels are at best uncorrelated with population size and at worst rise in line with it.

4

Service performance

- Across a wide range of performance measures (covering adult social care, administration and finance, planning, and waste), 12 metrics show no meaningful relationship between population size and performance.
- For all 9 measures where there is a statistically meaningful relationship, smaller councils perform better on average.
- Projected outcomes are better at the median population of existing unitary councils (275k) than at 500k.

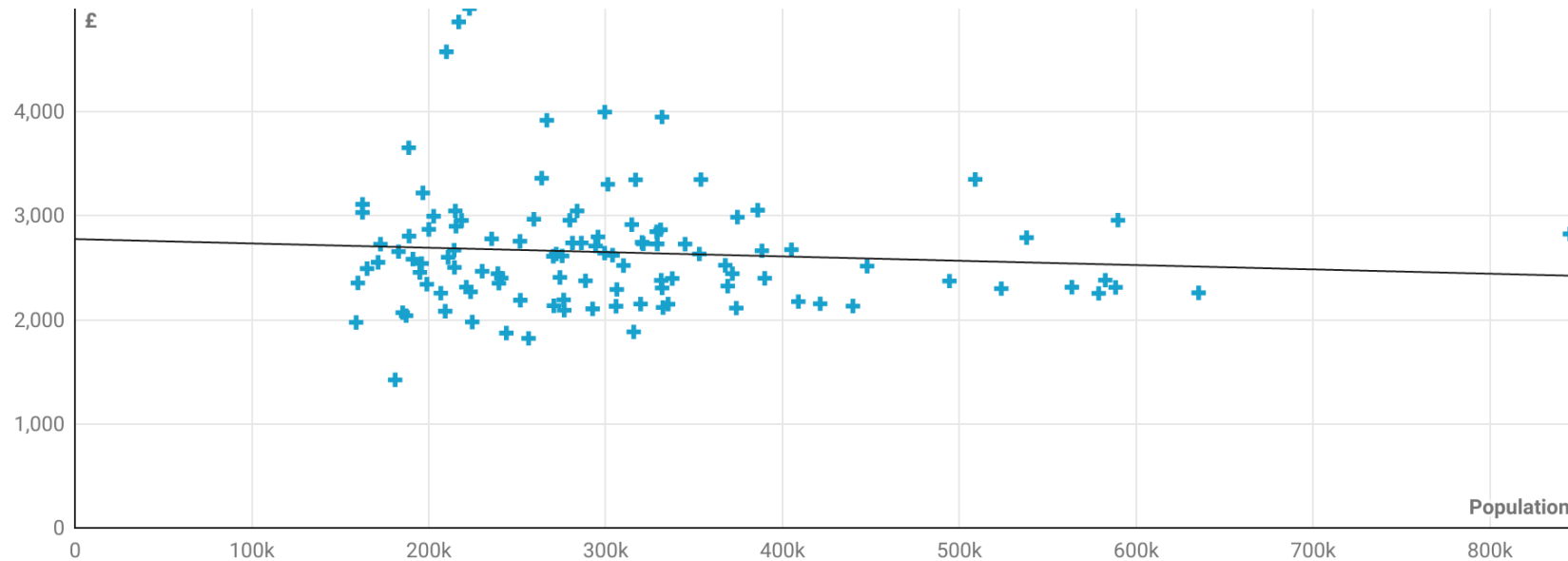
2. Detailed Analysis

A. Total spend per resident

Among the largest 90% of councils the relationship is so minimal as to be essentially non-existent

Total revenue expenditure on all services per head of population (£)

Covering councils with populations over ~157,000. This range covers all the proposed new councils being created under LGR.



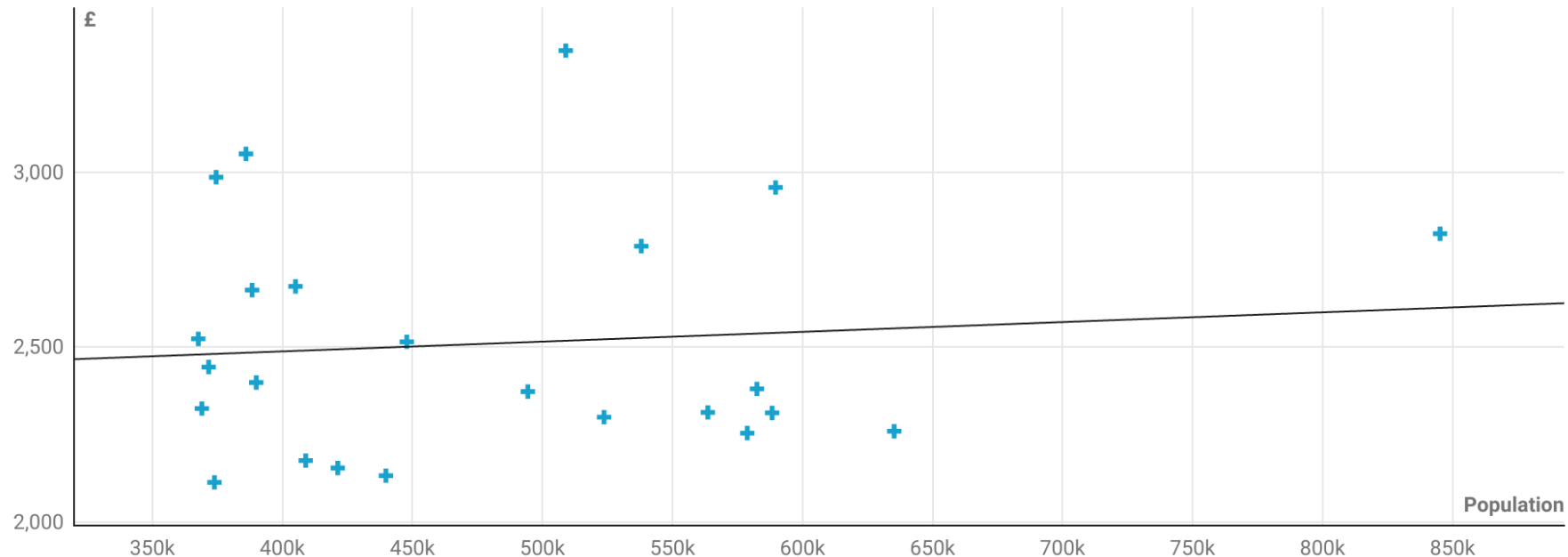
Total revenue expenditure is spending on all services, per head of population, including employee costs and running expenses | Data is missing from 7 councils | Technical definition: Adjusted $R^2 < 0$ | $p = 0.369$ and $R^2 = 0.007$

Chart: DCN • Source: LG Inform • Created with Datawrapper

The trendline of this chart is less predictive than guessing median spend regardless of population. It also does not pass the statistical significance test used by most social science academic journals.

There is a tipping point just above 350k population where the trend changes

Total revenue expenditure on all services per head of population (£)



Technical definition: Estimated coefficient of population variable > 0 | Councils with population > 360,000 included | Data is missing from 5 councils | $P = 0.646$ and $R^2 = 0.001$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Beyond 350k population, a larger population is associated with higher expenditure per person. But the link is not statistically strong.

8 of the 10 councils with lowest spend per resident have a population below the median (275k)

Rank	Council	Population	Expenditure per Head (£)	Above or below the median population?
116th	Rotherham	276,595	2,092	Above
117th	York	209,301	2,083	Below
118th	Southend-on-Sea	185,256	2,069	Below
119th	Wokingham	187,200	2,040	Below
120th	North Somerset	224,578	1,979	Below
121st	Windsor and Maidenhead	158,943	1,975	Below
122nd	Central Bedfordshire	315,877	1,884	Above
123rd	Swindon	243,875	1,872	Below
124th	Bexley	256,434	1,821	Below
125th	Thurrock	180,989	1,423	Below

Data for 7 councils is unavailable
Table: DCN • Source: LG Inform • Created with Datawrapper

None of these councils are close to the guideline 500k population level for new unitary councils

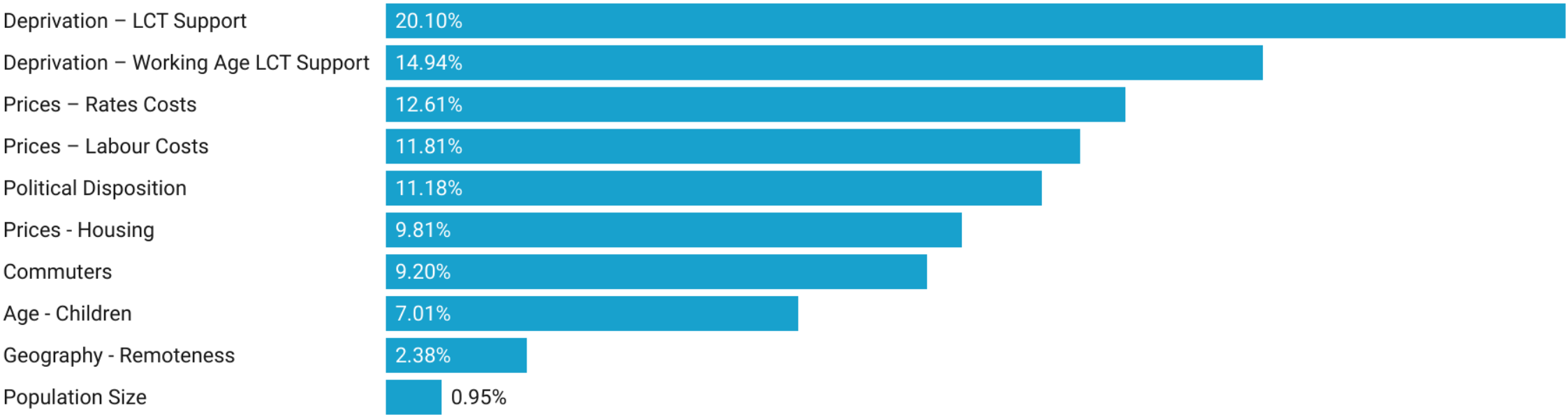
Controlling for other factors that potentially affect expenditure per resident

- To analyse the impact of population size in the context of the wide range of factors that potentially impact service spending per resident, we controlled for 22 other variables. These were based on factors accounted for in recent government funding proposals and academic research.
- Our analysis applied a stepwise regression to identify which of these factors contributed most to explaining the variation in spend per resident.
- This identified the following factors as most important:
 - Deprivation – LCT support recipients
 - Deprivation – Working Age LCT support recipients
 - Rates costs
 - Labour costs
 - House prices
 - Commuters – net inflows
 - % of children in local population
 - Geographic remoteness
 - Political disposition
- **Population was not one of these factors**

Population size predicts far less about spend per resident than other factors

The contribution of different input variables to the predictive performance of our model

Based on these results, it is about as plausible as not that population size has no real effect on expenditure per resident, once other variables are accounted for.



Relative importance metrics calculated for a multi-linear regression model | City of London and the Isles of Scilly excluded | Model statistics: $P = <0.001$ and $R^2 = 0.747$ | Population variable: $P=0.411$

Chart: DCN • Source: Various • Created with Datawrapper

B. Financial sustainability

Larger councils have been more likely to need Exceptional Financial Support

% of councils within a population range with Exceptional Financial Support agreed for 2025-26

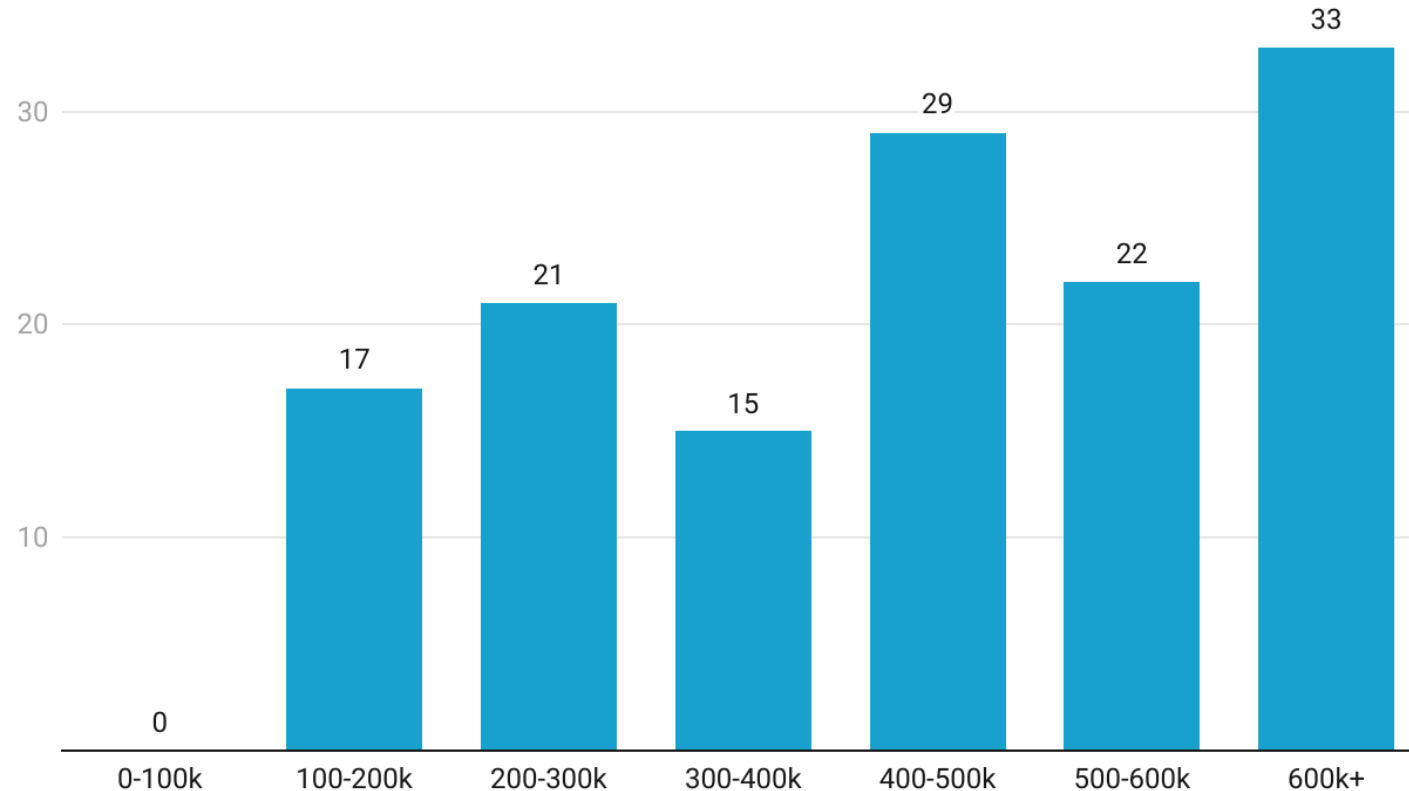


Chart: DCN • Source: MHCLG • Created with Datawrapper

Larger councils also required more EFS relative to the size of their budgets

Value of Exceptional Financial Support agreed for 2025-26 as % of the Core Spending Power for councils within a population range

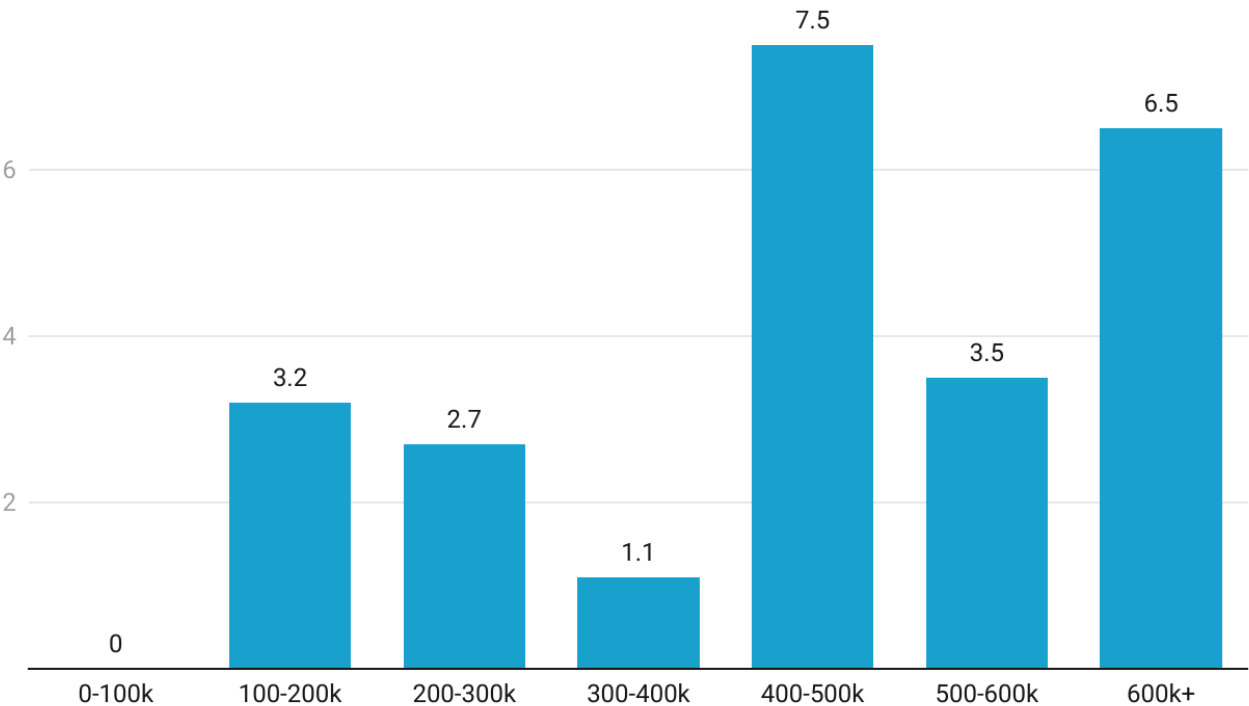
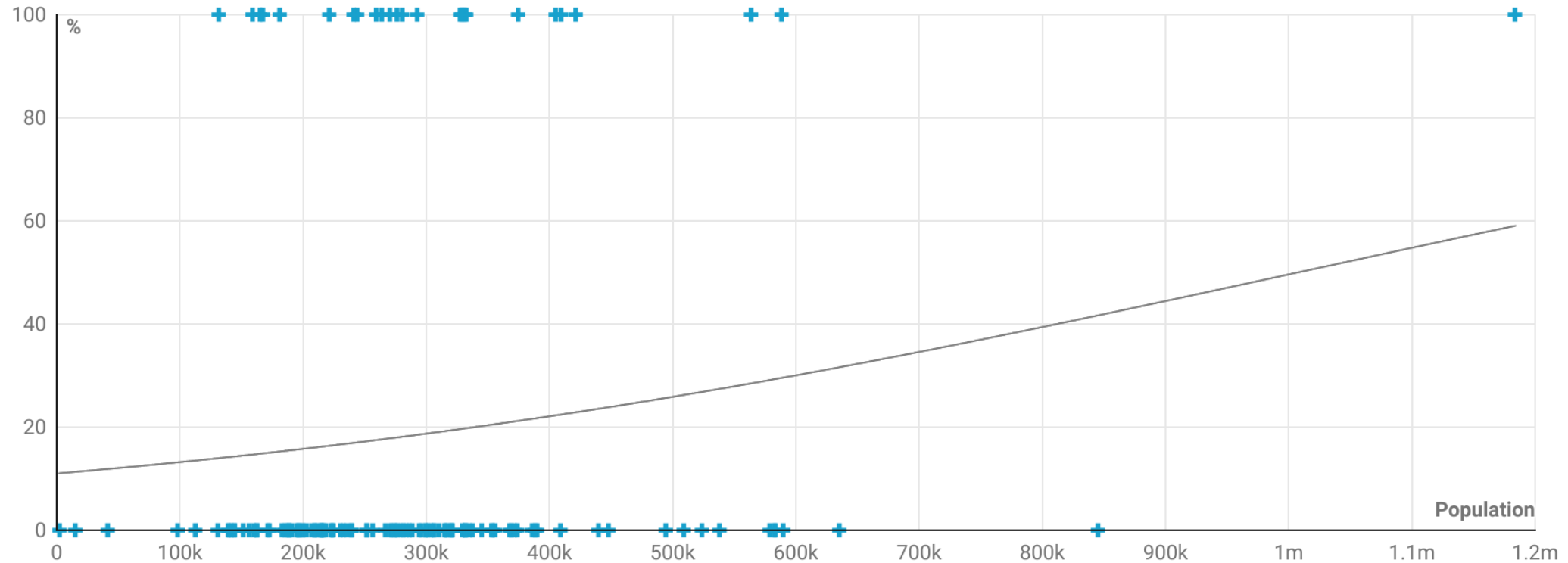


Chart: DCN • Source: Exceptional Financial Support for local authorities for 2025-26, MHCLG • Created with Datawrapper

Regression analysis suggests that larger councils are more likely to need EFS

The estimated and actual % probability that councils required EFS in 2025-26 by population

This indicates there is a relationship but we cannot confirm the robustness of the effect



Technical note: probabilities estimated using a logistic regression model | $P=0.12$

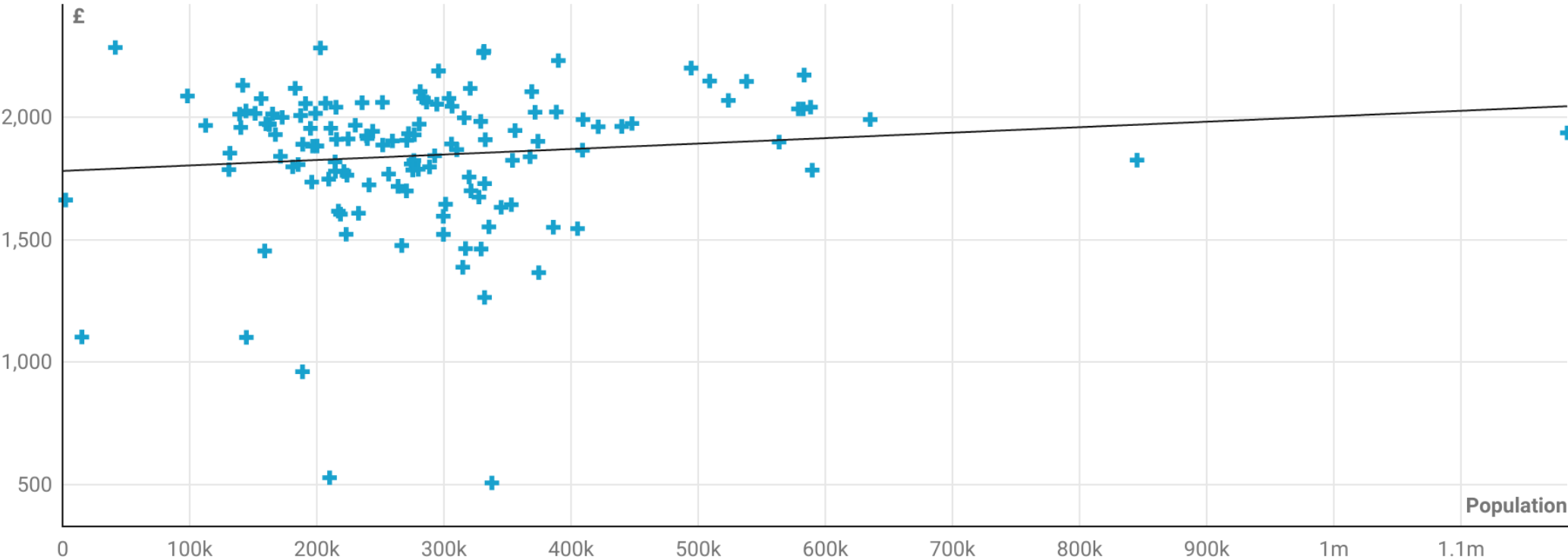
Chart: DCN • Source: "Exceptional Financial Support for local authorities for 2025-26", MHCLG • Created with Datawrapper

C. Council tax

There is a correlation between larger councils and higher council tax but it is not strong

Level of Band D Council Tax (£) by population

The Band D council tax requirement that is attributable (where relevant) to local services, including those provided by parish councils |



$P = 0.183$ and $R^2 = 0.014$

Chart: DCN • Source: LG Inform • Created with Datawrapper

The average council tax bill is higher in councils above the 500k population guideline than those below it

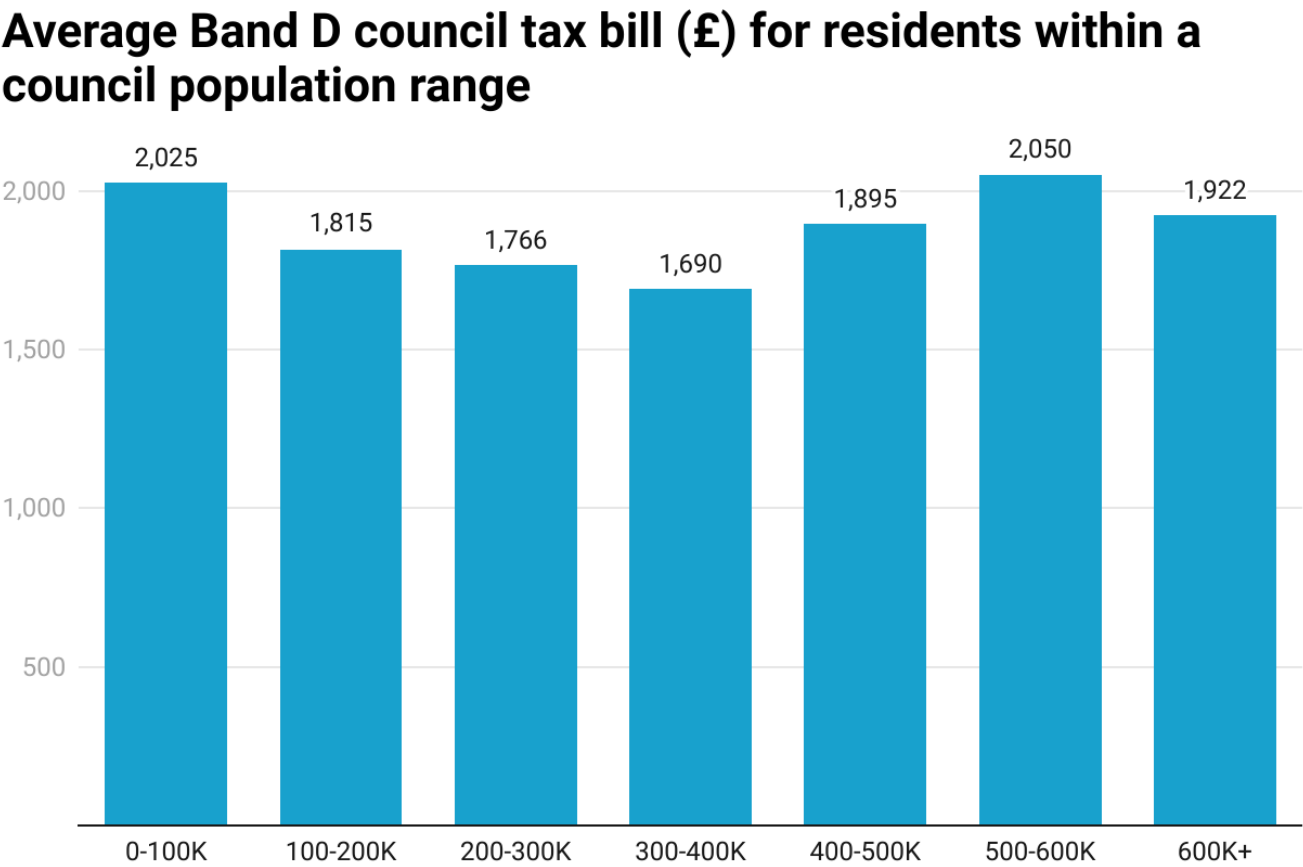
Average Band D council tax bill (£) for residents within council population range



The Band D council tax requirement that is attributable (where relevant) to local services, including those provided by parish councils

Chart: DCN • Source: LG Inform • Created with Datawrapper

Councils with populations under 100k and over 500k set the highest council tax



The Band D council tax requirement that is attributable (where relevant) to local services, including those provided by parish councils

Chart: DCN • Source: LG Inform • Created with Datawrapper

D. Service performance

Approach for analysing performance metrics

We analysed 21 performance metrics previously used in the OfLog Local Data Explorer (now closed)

1

Administration and Finance

- No. of upheld ombudsman complaints per 100k people
- Council tax collection rate
- Business rates collection rate
- Total debt as % of core spending power
- Debt servicing costs as % of core spending power
- Reserves as % of service spend
- Unringfenced reserves as % of net revenue expenditure

2

Adult Social Care (ASC)

- Carers who find it easy to find information about support (%)
- Clients who find it easy to find information about support (%)
- Clients receiving short term service where sequel was lower-level support or none (%)
- Carer-reported quality of life for carers
- Quality of life impact of adult social care services

3

Waste

- Household waste recycled (%)
- Household waste rejected (%)
- Residual waste per household (Kg)

4

Highways

- % of B and C roads where maintenance should be considered
- % of A roads and motorways where maintenance should be considered

5

Planning

- Major planning apps decided on time (%)
- Minor planning apps decided on time (%)
- Major planning apps overturned on appeal (%)
- Minor planning apps overturned on appeal (%)

Approach to analysing performance (continued)

- We conducted a regression analysis to determine which performance measures were meaningfully correlated with the population size of councils.
- For those measures, we estimated the most likely outcome for a given population based on this data.
- This was then used to compare whether a preferable outcome was likely to be achieved at the Government's guidelines population of 500,000 or the median population of current councils (274,775).

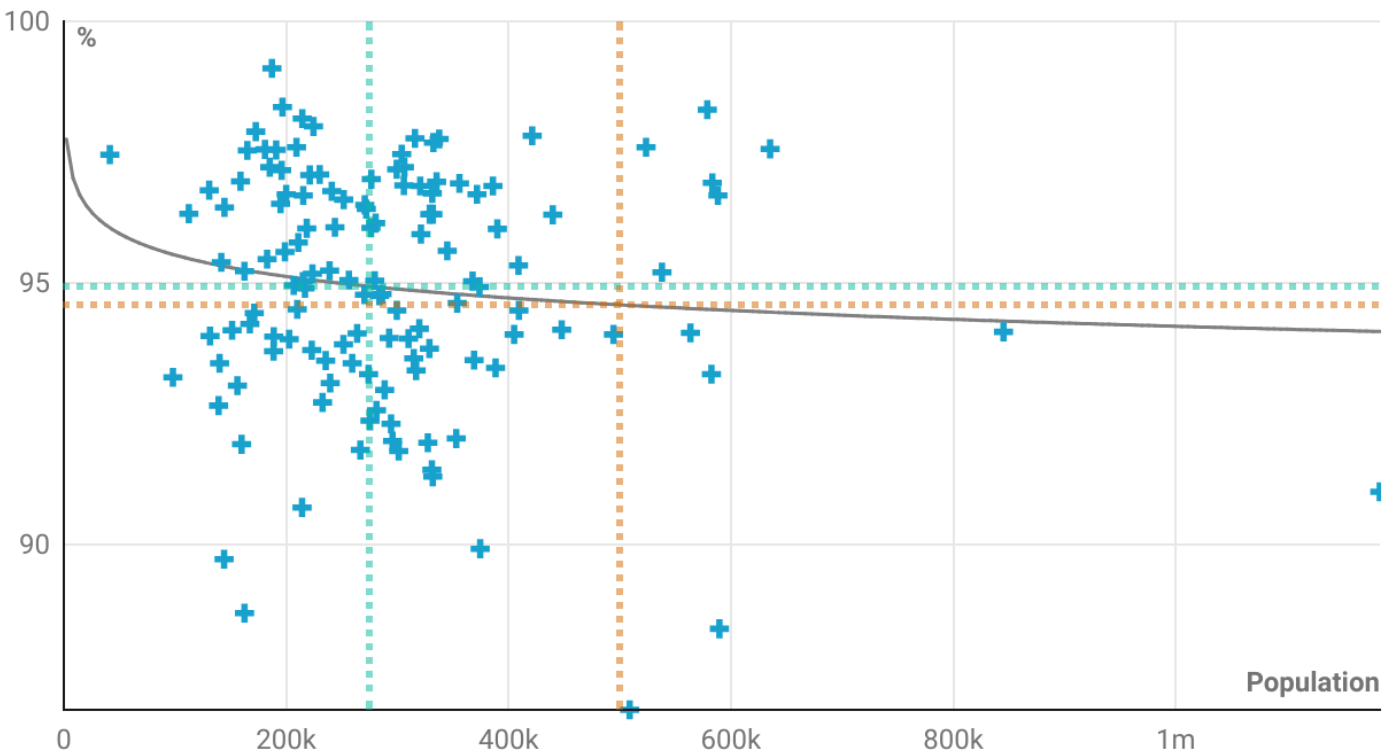
Note: a more detailed outline of this process is available in the technical note on slides 40 and 41.

For 9 metrics median population is better than 500k population; for all other metrics there is no meaningful link

Strength of effect	Median population appears better	500k population appears better
Strong or very strong	7 metrics: • ASC: carers who find information easily • ASC: clients who find information easily • ASC: clients receiving follow-up care • ASC: quality of life impact • Major planning apps decided in time • Non-major planning apps decided in time • Waste per household	None
Moderate or minimal	2 metrics: • Business rates collection • Council tax collection	None
No meaningful correlation	12 metrics: • ASC: carer-reported quality of life for carers • Debt servicing costs • Ombudsman complaints upheld • Total debt • Total reserves • Unringfenced reserves	• A roads & motorways requiring maintenance • B & C roads requiring maintenance • Waste recycled • Waste rejected • Major planning apps overturned at appeal • Minor planning apps overturned at appeal

Council tax collection rate

Council tax collected as a percentage of council tax due

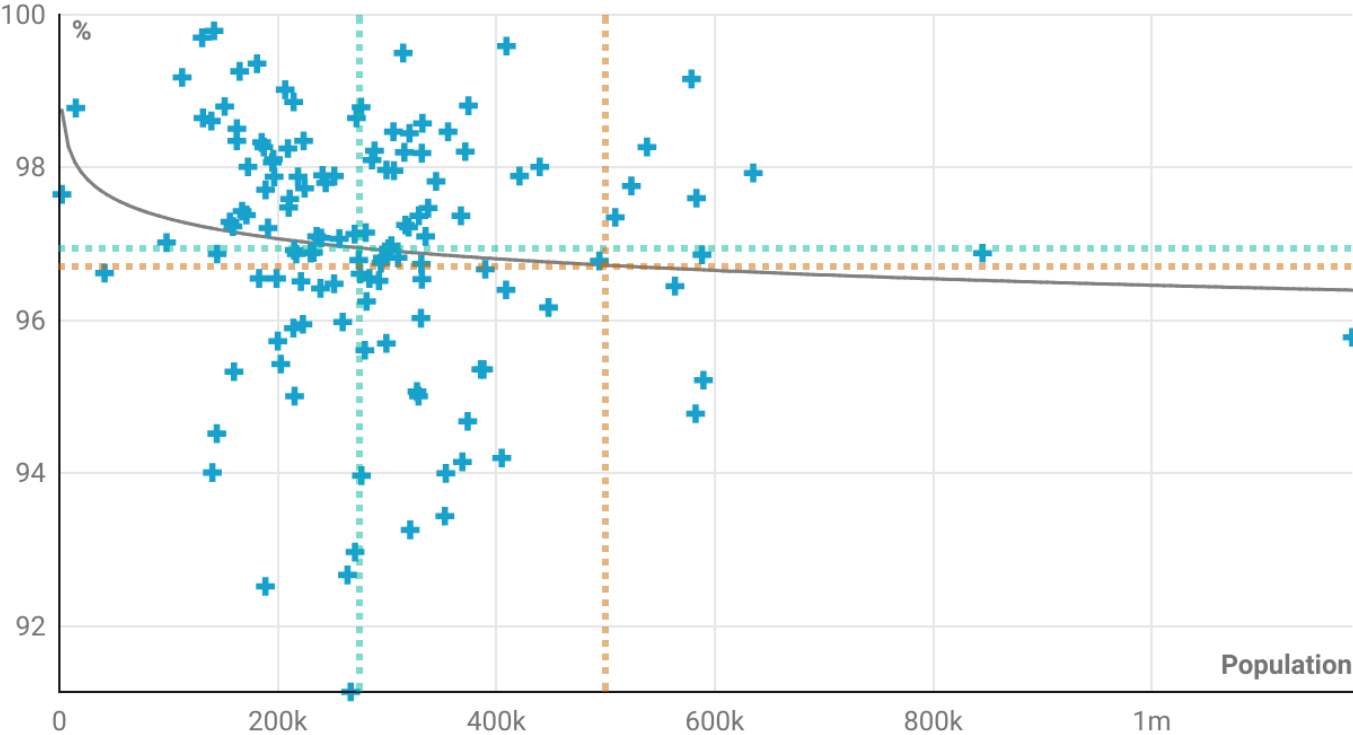


$P=0.051$ and Adjusted $R^2 = 0.021$
Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k population preferable?
Median
Evidence of a robust effect
Moderate

Business rates collection

Non-domestic rates collected as a percentage of non-domestic rates due



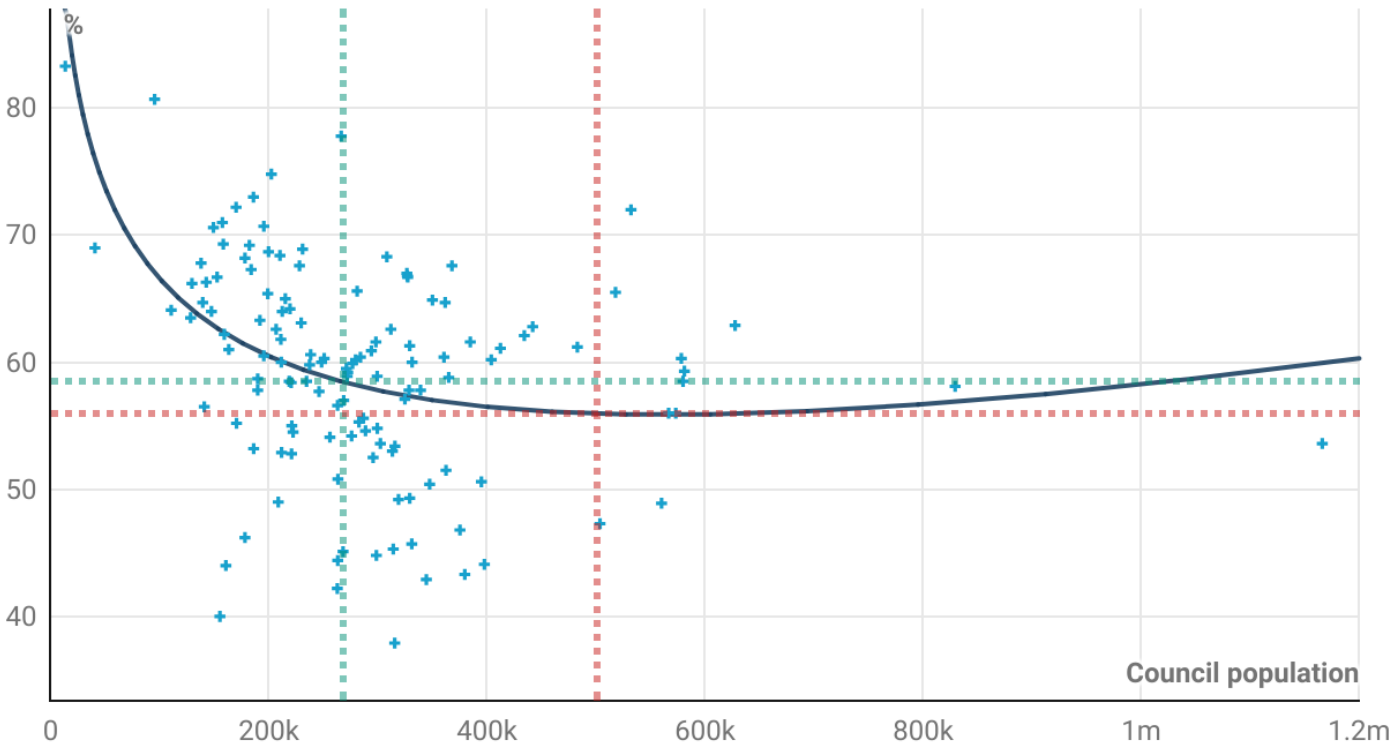
$P = 0.078$ and Adjusted $R^2 = 0.016$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k population preferable?
Median
Evidence of a robust effect
Moderate

Adult social care: ease of access to info for carers

% of carers who find it easy to access information about services / support

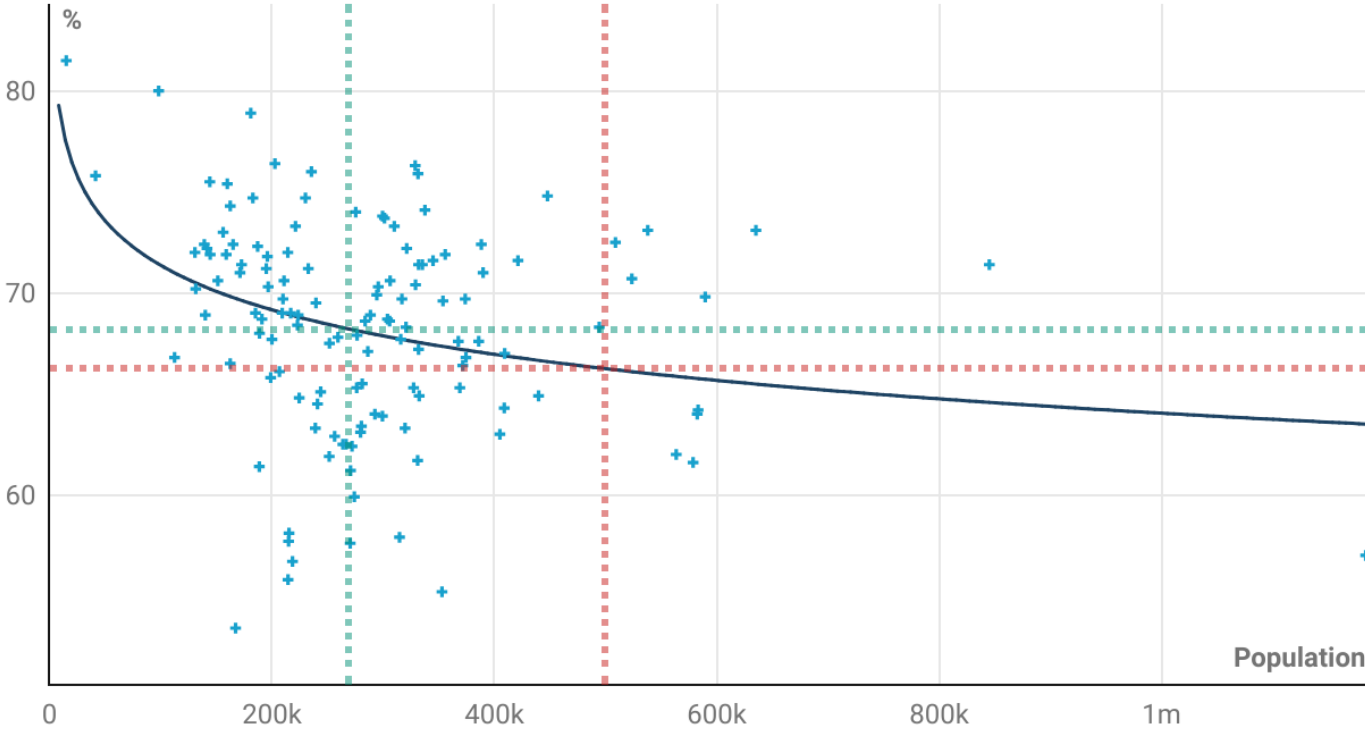


Is median or 500k population preferable?
Median
Evidence of a robust effect
Very strong

$P = <0.000$ and Adjusted $R^2 = 0.157$
Chart: DCN • Source: LG Inform • Created with Datawrapper

Adult social care: ease of access to info for users

Proportion of people who use care services who find it easy to find information about services / support

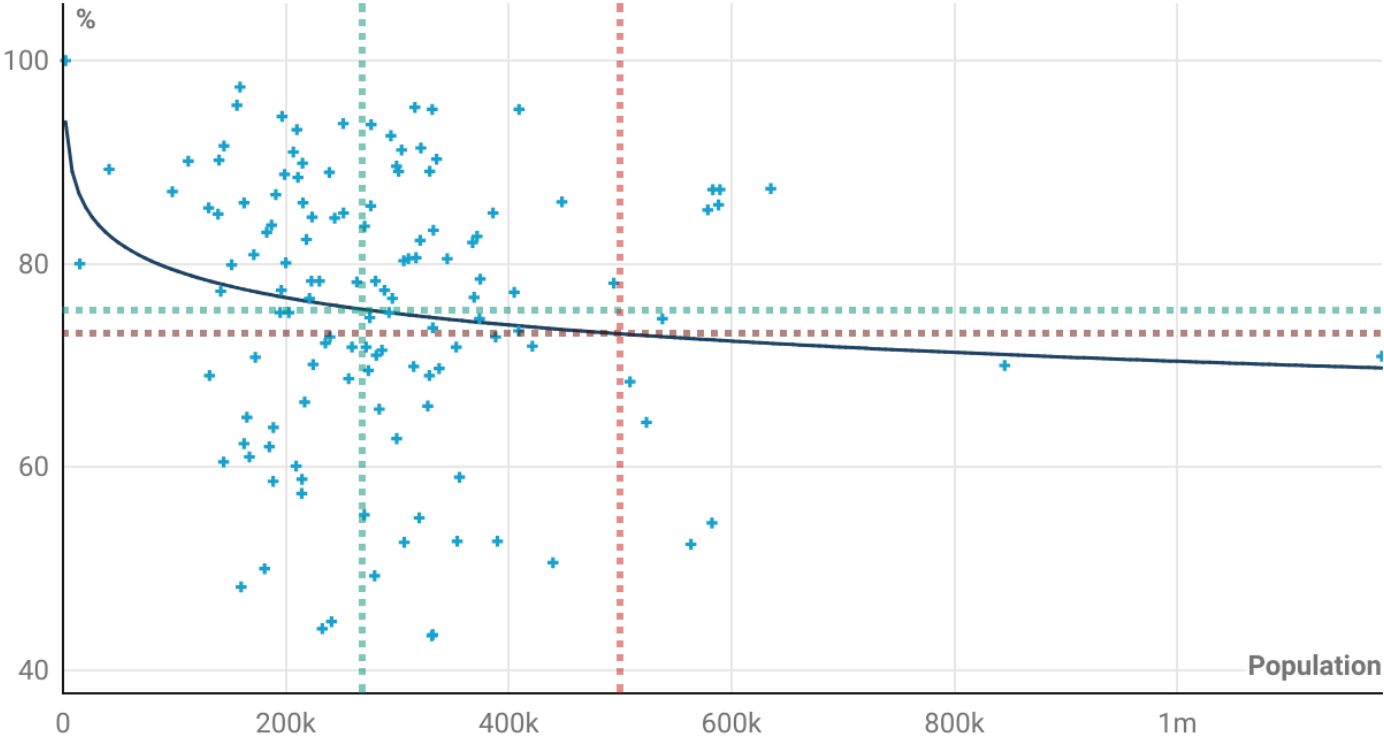


$P = 0.000$ and Adjusted $R^2 = 0.086$
Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k population preferable?
Median
Evidence of a robust effect
Very strong

Adult social care: follow-up care

% of clients receiving short term service where sequel was lower level support or none



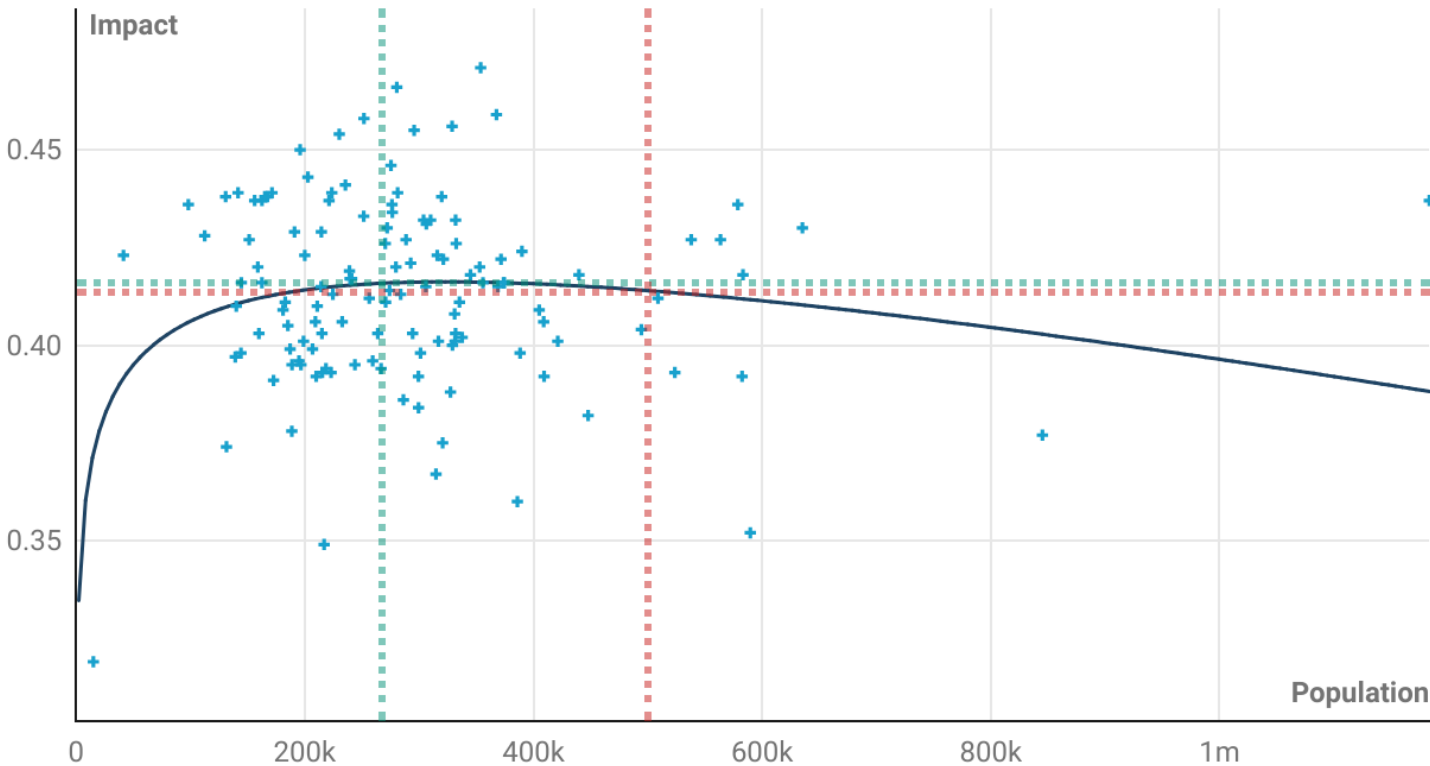
$P = 0.030$ and Adjusted $R^2 = 0.029$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k population preferable?
Median
Evidence of a robust effect
Strong

Adult social care: quality of life impact

Adjusted Social care-related quality of life impact of Adult Social Care services



Is median or 500k population preferable?

Median

Evidence of a robust effect

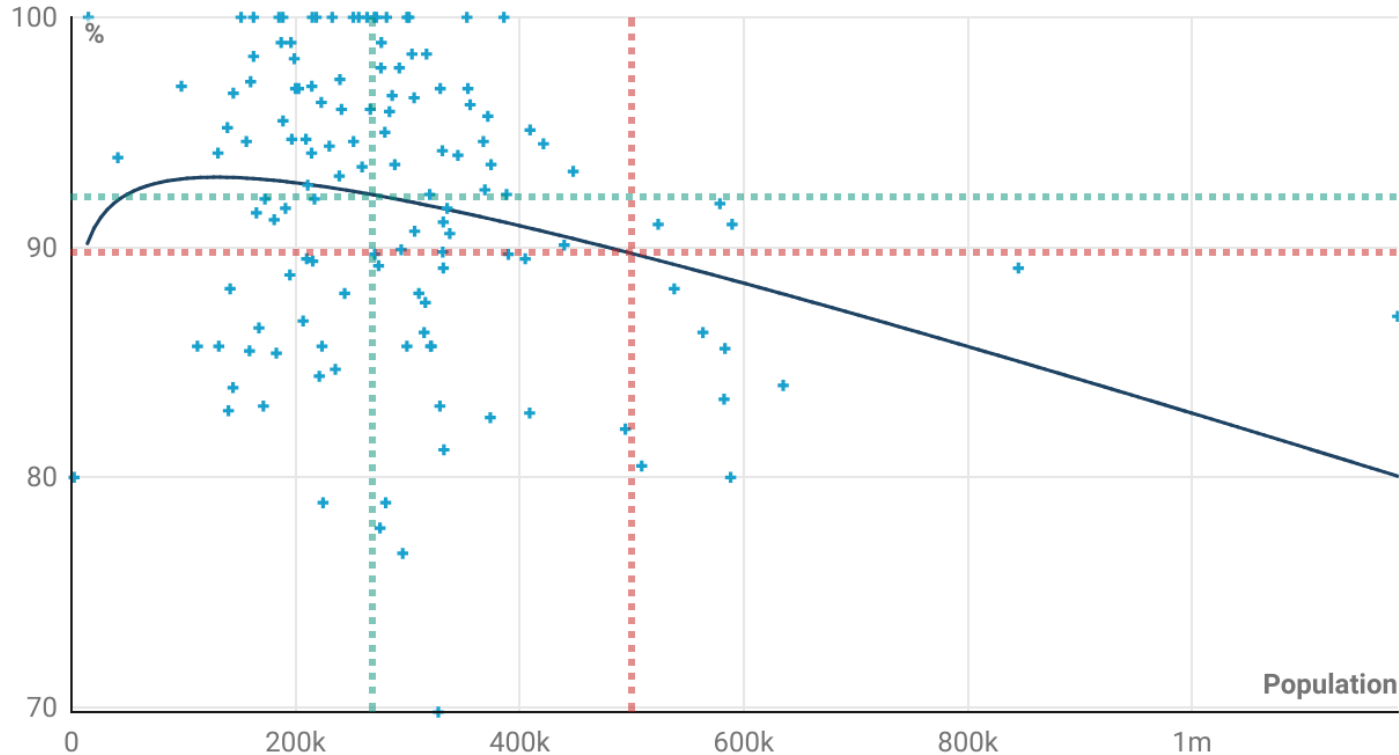
Strong

$P = 0.042$ and Adjusted $R^2 = 0.033$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Major planning applications decided on time

Percentage of all major development planning applications decided within 13 weeks or agreed time - 24 months



$P = 0.008$ and Adjusted $R^2 = 0.057$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k
population preferable?

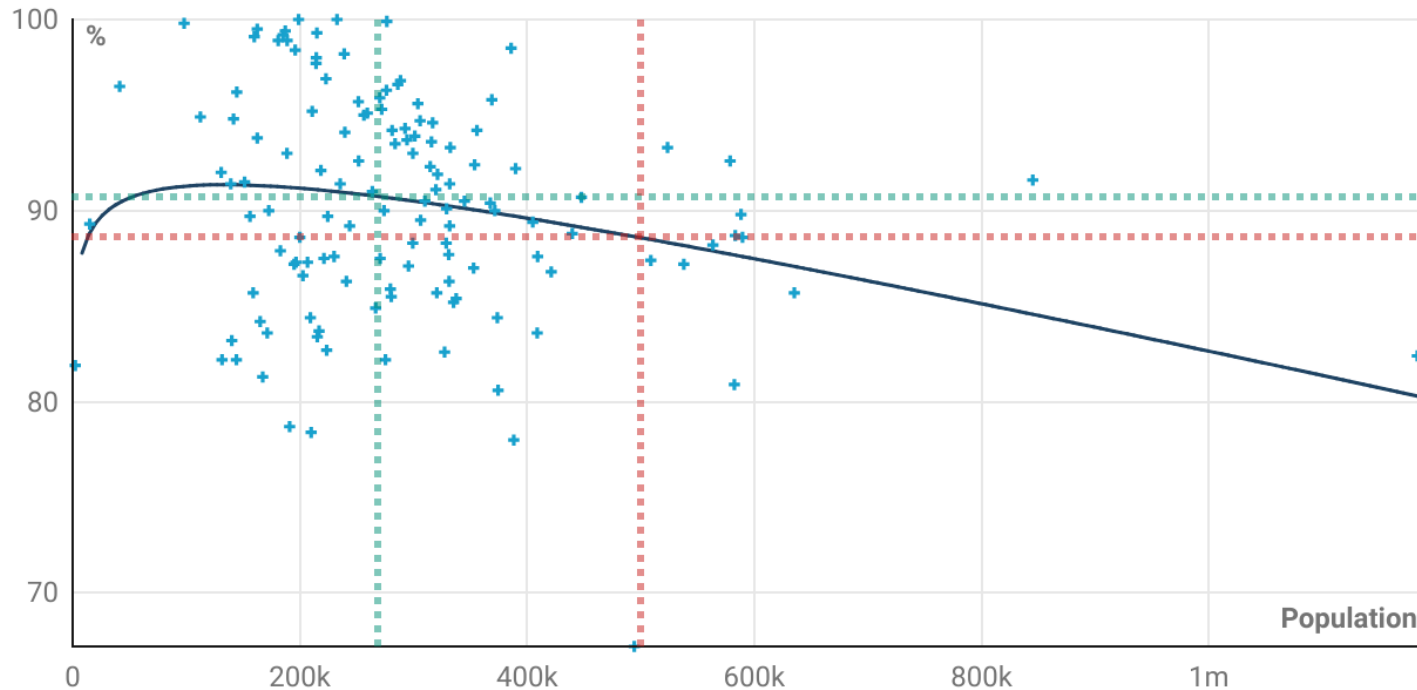
Median

Evidence of a robust
effect

Very strong

Minor planning applications decided on time

Percentage of all non-major development planning applications decided within 8 weeks or agreed time - 24 months



$P = 0.014$ and Adjusted $R^2 = 0.049$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k population preferable?

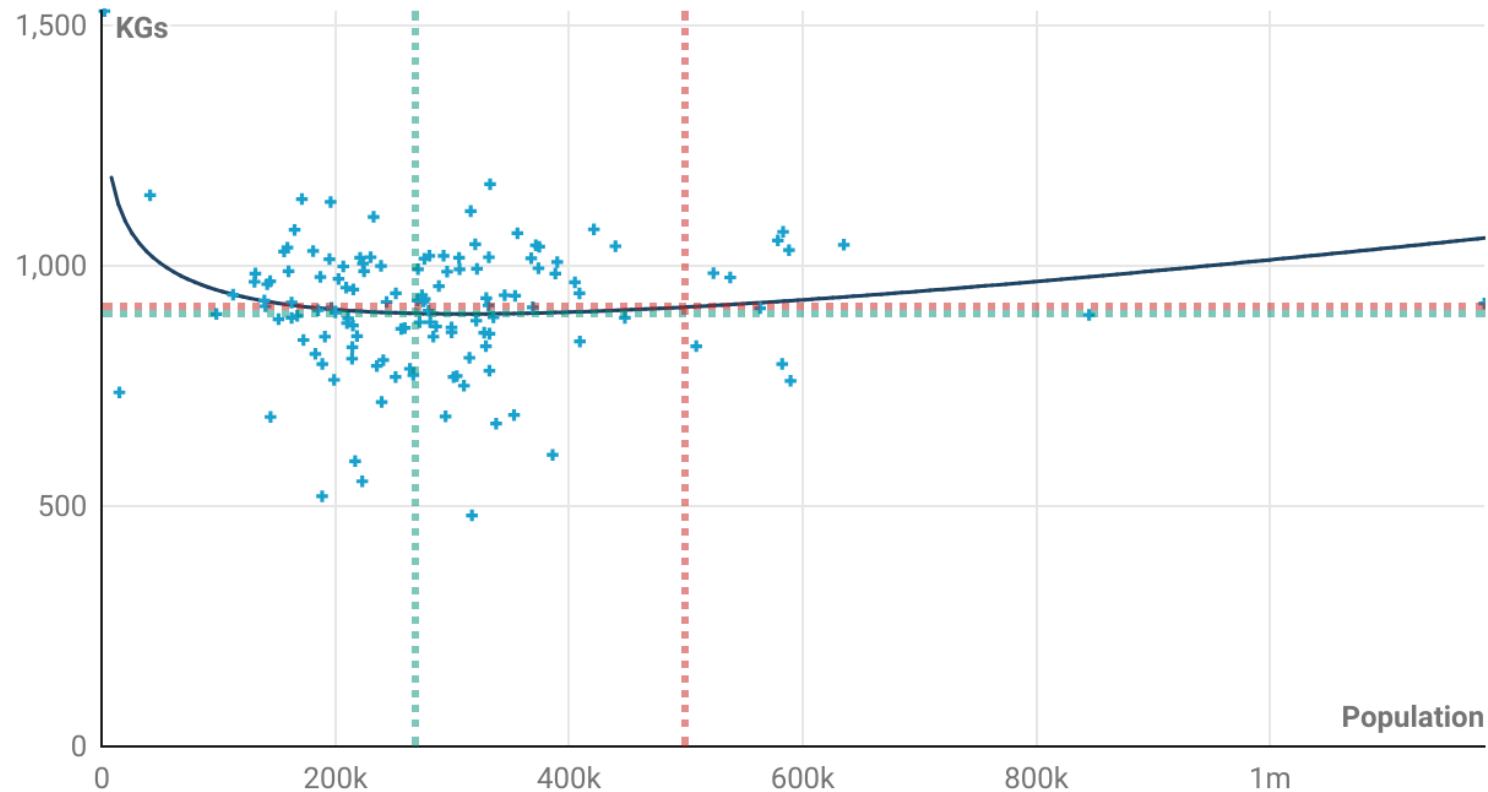
Median

Evidence of a robust effect

Strong

Residual waste collection

Total household waste per 1,000 households (annual)



$P = 0.001$ and Adjusted $R^2 = 0.092$

Chart: DCN • Source: LG Inform • Created with Datawrapper

Is median or 500k
population preferable?

Median

Evidence of a robust
effect

Very strong

Annex 1: Technical details on Performance Measure Analysis

Technical note: analytical process applied (1)

	Plain Language	Technical Definition
1.	Each performance metric is modelled with population as a predictor	Regression models run for each performance metric with predictors: a) population, b) population in base 10, and c) both together.
2.	Any metric that did not produce a meaningful correlation was dropped from further analysis	Metrics where no model achieved an adjusted $R^2 > 0.01$ were dropped.
3.	Otherwise, for each metric, the model which was most predictive of the variations in the actual results was chosen.	The model with the greatest adjusted R^2 is chosen. In the interests of parsimony, a penalty of 0.01 was applied to models that used both predictors.
4.	A robustness test was conducted for each of the chosen models to determine how likely the correlation is to reflect more than just random fluctuation. The models were classified accordingly.	A t-test was conducted on each model. The models were classified in terms of the resulting p-values as follows: “Very strong” < 0.01, “Strong” < 0.05, “Moderate” < 0.1, “Minimal” < 0.25, “Weak” < 0.5, and “Very Weak” < 1

Technical note: analytical process applied (2)

	Plain Language	Technical Definition
5.	The trendline from each chosen model was used to obtain estimates for the most likely outcome for populations ranging from 5,000 – 1,200,000. The highest or lowest value - depending on whether the metric represents a desirable or undesirable outcome – was identified as ‘the optimum population’ for that metric.	The regression equation for each chosen model was solved for Y for 500-wide intervals of X ranging between 5,000 and 1,200,000. Depending on if the metric represents a desirable or undesirable outcome, the maximum or minimum predicted Y-value was identified and the corresponding X-value deemed ‘the optimum population’ for that metric.
6.	The trendline for each chosen model was used to estimate the most likely outcome for each metric at populations of: a) <u>274,775</u> – the median for existing councils; and b) <u>500,000</u> – the Government’s guidelines population level for new councils. The projected outcome for the ‘median’ or ‘target’ population was deemed preferable based on whether the metric represents a desirable characteristic or not.	The regression equation for each chosen model was solved for Y, when X = 274,775 and 500,000. If the metric represents a desirable outcome, then the > Y-value was preferred and the corresponding X-value deemed preferable. If the metric represents an undesirable outcome, then the < Y-value was preferred and the corresponding X-value deemed preferable.