

LOW INCOME ADJUSTMENT IN THE OLDER PEOPLE'S PERSONAL SOCIAL SERVICES FSS FORMULA: OCTOBER 2005 UPDATE

Introduction

This note presents the results of work by Department of Health analysts to update the consultation option SSE3 for the low-income adjustment (LIA). The purpose of this update is to allow consistency across the different elements of the Older People's FSS.

Background

The existing low-income adjustment is calculated using data from the 1991 Census. During the summer, we consulted on one option for updating the LIA to include 2001 Census data. Option SSE3 is created using information on the proportion of pensioners living in rented accommodation in each area. This has a slightly different data definition to the very similar variable used in the main needs formula.

To ensure consistency we have re-run the low-income adjustment regression with the older people living in rented accommodation variable from option SSE2. Using the new data produces very small changes in the coefficient on the low income adjustment and the allocations of older peoples FSS. The results are given below, and shown in detail at Annex A. An exemplification of the effect of amending option SSE3 is at Annex B.

| | Consultation LIA | Revised LIA |
|---|------------------|-------------|
| Constant | 0.271 | 0.274 |
| Coefficient on older people in rented accommodation | -0.133 | -0.133 |

This change will mean that the same data will be used to calculate the deprivation and low-income adjustment elements of the olderpersons' formula.

Annex A: Regression output

Variables Entered/Removed(b,c)

| Model | Variables Entered | Variables Removed | Method |
|-------|-------------------|-------------------|--------|
| 1 | OPRENTED(a) | . | Enter |

a All requested variables entered.

b Dependent Variable: NEWCOMB7

c Weighted Least Squares Regression- Weighted by POP65PLUS

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---------|----------|-------------------|----------------------------|
| 1 | .317(a) | .100 | .094 | 8.676785537 592470 |

a Predictors: (Constant), OPRENTED

ANOVA(b,c)

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|---------|
| 1 | Regression | 1209.482 | 1 | 1209.482 | 16.065 | .000(a) |
| | Residual | 10841.271 | 144 | 75.287 | | |
| | Total | 12050.753 | 145 | | | |

a Predictors: (Constant), OPRENTED

b Dependent Variable: NEWCOMB7

c Weighted Least Squares Regression - Weighted by POP65PLUS

Coefficients(a,b)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .274 | .009 | | 29.006 | .000 |
| | OPRENTED | -.133 | .033 | -.317 | -4.008 | .000 |

a Dependent Variable: NEWCOMB7

b Weighted Least Squares Regression - Weighted by POP65PLUS

Annex B: Comparison between the two sets of Exemplifications

| LANAMES | OLD LIA (orig 05/06 allocations) (£m) | CONSULTATION LIA | | POST CONSULTATION LIA | |
|-------------------------------|--|--------------------------------|--------|--------------------------------|--------|
| | | Monetary difference (£m) | % diff | Monetary difference (£m) | % diff |
| Barking and Dagenham | 25.739 | -0.368 | -1.43 | -0.362 | -1.41 |
| Barnet | 39.340 | -1.693 | -4.30 | -1.675 | -4.26 |
| Barnsley | 30.886 | 0.481 | 1.56 | 0.478 | 1.55 |
| Bath & North East Somerset | 19.358 | 0.158 | 0.81 | 0.156 | 0.80 |
| Bedfordshire | 37.038 | -0.354 | -0.96 | -0.351 | -0.95 |
| Bexley | 24.231 | -0.372 | -1.54 | -0.370 | -1.53 |
| Birmingham | 138.835 | -3.856 | -2.78 | -3.856 | -2.78 |
| Blackburn with Darwen | 15.129 | 0.103 | 0.68 | 0.100 | 0.66 |
| Blackpool | 20.906 | 0.106 | 0.51 | 0.100 | 0.48 |
| Bolton | 33.025 | 0.356 | 1.08 | 0.353 | 1.07 |
| Bournemouth | 21.793 | 0.303 | 1.39 | 0.299 | 1.37 |
| Bracknell Forest | 9.172 | -0.274 | -2.99 | -0.270 | -2.95 |
| Bradford | 50.776 | 0.637 | 1.26 | 0.627 | 1.24 |
| Brent | 32.323 | -3.282 | -10.15 | -3.269 | -10.11 |
| Brighton & Hove | 28.242 | 0.962 | 3.41 | 0.956 | 3.39 |
| Bristol | 48.532 | 0.029 | 0.06 | 0.029 | 0.06 |
| Bromley | 30.744 | 0.058 | 0.19 | 0.064 | 0.21 |
| Buckinghamshire | 46.124 | -1.022 | -2.22 | -1.009 | -2.19 |
| Bury | 19.974 | 0.152 | 0.76 | 0.150 | 0.75 |
| Calderdale | 21.206 | 1.054 | 4.97 | 1.050 | 4.95 |
| Cambridgeshire | 56.809 | 0.804 | 1.41 | 0.809 | 1.42 |
| Camden | 30.298 | -0.666 | -2.20 | -0.639 | -2.11 |
| Cheshire | 75.426 | 0.621 | 0.82 | 0.614 | 0.81 |
| City of London | 1.307 | -0.023 | -1.75 | -0.021 | -1.61 |
| Cornwall | 66.292 | 0.408 | 0.62 | 0.388 | 0.59 |
| Coventry | 36.294 | 0.104 | 0.29 | 0.101 | 0.28 |
| Croydon | 31.360 | -1.462 | -4.66 | -1.456 | -4.64 |
| Cumbria | 62.781 | 0.157 | 0.25 | 0.145 | 0.23 |
| Darlington | 11.141 | 0.294 | 2.64 | 0.291 | 2.62 |
| Derby | 27.238 | 0.914 | 3.36 | 0.908 | 3.34 |
| Derbyshire | 93.650 | 1.655 | 1.77 | 1.637 | 1.75 |
| Devon | 85.999 | 1.905 | 2.21 | 1.879 | 2.19 |
| Doncaster | 36.658 | 0.513 | 1.40 | 0.506 | 1.38 |
| Dorset | 46.870 | 2.597 | 5.54 | 2.583 | 5.51 |
| Dudley | 41.530 | -0.783 | -1.88 | -0.787 | -1.89 |
| Durham | 71.808 | 0.287 | 0.40 | 0.280 | 0.39 |
| Ealing | 34.529 | -2.773 | -8.03 | -2.755 | -7.98 |
| East Riding of Yorkshire | 35.505 | 1.208 | 3.40 | 1.201 | 3.38 |
| East Sussex | 62.402 | 3.041 | 4.87 | 3.028 | 4.85 |
| Enfield | 31.510 | -0.875 | -2.78 | -0.869 | -2.76 |
| Essex | 146.122 | 2.068 | 1.42 | 2.054 | 1.41 |
| Gateshead | 29.513 | 0.089 | 0.30 | 0.086 | 0.29 |
| Gloucestershire | 61.259 | 0.900 | 1.47 | 0.894 | 1.46 |
| Greenwich | 34.485 | -1.079 | -3.13 | -1.050 | -3.05 |
| Hackney | 33.233 | -1.438 | -4.33 | -1.403 | -4.22 |

| | | | | | |
|-------------------------|---------|--------|-------|--------|-------|
| Halton | 15.043 | -0.414 | -2.75 | -0.415 | -2.76 |
| Hammersmith and Fulham | 23.192 | -0.806 | -3.48 | -0.785 | -3.39 |
| Hampshire | 115.374 | 0.872 | 0.76 | 0.861 | 0.75 |
| Haringey | 23.466 | -1.459 | -6.22 | -1.453 | -6.19 |
| Harrow | 26.761 | -1.720 | -6.43 | -1.708 | -6.38 |
| Hartlepool | 12.103 | 0.091 | 0.75 | 0.089 | 0.73 |
| Havering | 26.709 | -0.132 | -0.49 | -0.127 | -0.48 |
| Herefordshire | 21.195 | -0.077 | -0.36 | -0.081 | -0.38 |
| Hertfordshire | 118.214 | -1.523 | -1.29 | -1.490 | -1.26 |
| Hillingdon | 27.444 | -1.049 | -3.82 | -1.036 | -3.78 |
| Hounslow | 23.747 | -1.537 | -6.47 | -1.525 | -6.42 |
| Isle of Wight Council | 18.291 | 0.391 | 2.14 | 0.389 | 2.13 |
| Isles of Scilly | 0.374 | -0.016 | -4.26 | -0.015 | -4.12 |
| Islington | 28.531 | -1.227 | -4.30 | -1.197 | -4.20 |
| Kensington and Chelsea | 21.198 | -0.211 | -0.99 | -0.191 | -0.90 |
| Kent | 141.440 | 1.601 | 1.13 | 1.573 | 1.11 |
| Kingston upon Hull | 34.890 | 0.799 | 2.29 | 0.795 | 2.28 |
| Kingston upon Thames | 14.661 | -0.252 | -1.72 | -0.247 | -1.69 |
| Kirklees | 41.421 | 1.348 | 3.26 | 1.340 | 3.24 |
| Knowsley | 24.255 | -1.902 | -7.84 | -1.906 | -7.86 |
| Lambeth | 33.188 | -1.532 | -4.62 | -1.499 | -4.52 |
| Lancashire | 126.483 | 2.737 | 2.16 | 2.699 | 2.13 |
| Leeds | 83.825 | 2.004 | 2.39 | 1.988 | 2.37 |
| Leicester | 34.043 | -1.040 | -3.06 | -1.047 | -3.08 |
| Leicestershire | 57.682 | 0.637 | 1.10 | 0.620 | 1.07 |
| Lewisham | 34.496 | -1.545 | -4.48 | -1.514 | -4.39 |
| Lincolnshire | 74.530 | 2.926 | 3.93 | 2.904 | 3.90 |
| Liverpool | 73.769 | -4.159 | -5.64 | -4.173 | -5.66 |
| Luton | 17.270 | -0.475 | -2.75 | -0.474 | -2.74 |
| Manchester | 61.320 | -1.152 | -1.88 | -1.147 | -1.87 |
| Medway | 20.424 | -0.031 | -0.15 | -0.034 | -0.17 |
| Merton | 19.721 | -0.758 | -3.84 | -0.748 | -3.79 |
| Middlesbrough | 17.358 | 0.001 | 0.00 | -0.001 | -0.01 |
| Milton Keynes | 18.629 | -0.061 | -0.33 | -0.055 | -0.30 |
| Newcastle upon Tyne | 38.939 | 0.430 | 1.10 | 0.426 | 1.09 |
| Newham | 29.087 | -1.887 | -6.49 | -1.877 | -6.45 |
| Norfolk | 96.814 | 3.901 | 4.03 | 3.881 | 4.01 |
| North East Lincolnshire | 18.448 | 0.478 | 2.59 | 0.472 | 2.56 |
| North Lincolnshire | 17.055 | 0.252 | 1.48 | 0.249 | 1.46 |
| North Somerset | 22.772 | 0.657 | 2.88 | 0.654 | 2.87 |
| North Tyneside | 27.212 | 0.652 | 2.40 | 0.646 | 2.38 |
| North Yorkshire | 59.913 | 1.545 | 2.58 | 1.527 | 2.55 |
| Northamptonshire | 61.600 | 1.019 | 1.65 | 1.007 | 1.63 |
| Northumberland | 39.747 | 0.557 | 1.40 | 0.553 | 1.39 |
| Nottingham | 33.529 | 0.375 | 1.12 | 0.368 | 1.10 |
| Nottinghamshire | 83.885 | 2.225 | 2.65 | 2.208 | 2.63 |
| Oldham | 26.591 | 0.550 | 2.07 | 0.547 | 2.06 |
| Oxfordshire | 60.420 | -0.687 | -1.14 | -0.676 | -1.12 |
| Peterborough | 17.420 | 0.276 | 1.59 | 0.278 | 1.60 |
| Plymouth | 28.818 | -0.152 | -0.53 | -0.157 | -0.55 |
| Poole | 15.598 | 0.470 | 3.02 | 0.466 | 2.99 |
| Portsmouth | 19.991 | 0.332 | 1.66 | 0.332 | 1.66 |
| Reading | 13.267 | -0.252 | -1.90 | -0.247 | -1.86 |
| Redbridge | 27.762 | -1.313 | -4.73 | -1.307 | -4.71 |
| Redcar and Cleveland | 17.436 | 0.457 | 2.62 | 0.454 | 2.60 |

| | | | | | |
|------------------------|-----------|--------|-------|--------|-------|
| Richmond upon Thames | 18.189 | -0.283 | -1.55 | -0.274 | -1.51 |
| Rochdale | 24.699 | 0.322 | 1.30 | 0.319 | 1.29 |
| Rotherham | 34.821 | 0.492 | 1.41 | 0.489 | 1.40 |
| Rutland | 3.131 | 0.105 | 3.34 | 0.104 | 3.32 |
| Salford | 35.154 | -0.226 | -0.64 | -0.226 | -0.64 |
| Sandwell | 47.188 | -1.521 | -3.22 | -1.521 | -3.22 |
| Sefton | 39.290 | -1.185 | -3.02 | -1.192 | -3.03 |
| Sheffield | 75.894 | 2.388 | 3.15 | 2.380 | 3.14 |
| Shropshire | 35.079 | -0.008 | -0.02 | -0.015 | -0.04 |
| Slough | 12.706 | -0.829 | -6.52 | -0.824 | -6.48 |
| Solihull | 21.326 | 0.053 | 0.25 | 0.051 | 0.24 |
| Somerset | 58.764 | 1.525 | 2.59 | 1.507 | 2.56 |
| South Gloucestershire | 22.626 | -0.157 | -0.69 | -0.159 | -0.70 |
| South Tyneside | 24.785 | 0.298 | 1.20 | 0.295 | 1.19 |
| Southampton | 23.743 | 0.316 | 1.33 | 0.319 | 1.34 |
| Southend-on-Sea | 20.859 | 0.695 | 3.33 | 0.691 | 3.31 |
| Southwark | 37.440 | -1.390 | -3.71 | -1.354 | -3.62 |
| St Helens | 24.770 | -0.553 | -2.23 | -0.558 | -2.25 |
| Staffordshire | 87.017 | -0.085 | -0.10 | -0.102 | -0.12 |
| Stockport | 31.936 | 0.454 | 1.42 | 0.451 | 1.41 |
| Stockton-on-Tees | 19.774 | 0.136 | 0.69 | 0.132 | 0.67 |
| Stoke-on-Trent | 33.450 | 0.334 | 1.00 | 0.327 | 0.98 |
| Suffolk | 77.542 | 2.773 | 3.58 | 2.758 | 3.56 |
| Sunderland | 41.484 | -0.403 | -0.97 | -0.408 | -0.98 |
| Surrey | 110.283 | -1.426 | -1.29 | -1.385 | -1.26 |
| Sutton | 20.075 | -0.305 | -1.52 | -0.296 | -1.47 |
| Swindon | 16.952 | 0.019 | 0.11 | 0.018 | 0.10 |
| Tameside | 28.167 | 0.418 | 1.48 | 0.415 | 1.47 |
| Telford and the Wrekin | 16.512 | -0.255 | -1.55 | -0.259 | -1.57 |
| Thurrock | 15.327 | -0.152 | -0.99 | -0.149 | -0.97 |
| Torbay | 19.886 | 0.485 | 2.44 | 0.480 | 2.41 |
| Tower Hamlets | 32.107 | -1.371 | -4.27 | -1.340 | -4.17 |
| Trafford | 24.716 | -0.157 | -0.64 | -0.162 | -0.66 |
| Wakefield | 42.430 | 0.803 | 1.89 | 0.798 | 1.88 |
| Walsall | 38.160 | -1.137 | -2.98 | -1.137 | -2.98 |
| Waltham Forest | 25.963 | -0.706 | -2.72 | -0.699 | -2.69 |
| Wandsworth | 34.910 | -1.799 | -5.15 | -1.767 | -5.06 |
| Warrington | 20.528 | -0.051 | -0.25 | -0.053 | -0.26 |
| Warwickshire | 56.867 | 0.117 | 0.21 | 0.111 | 0.20 |
| West Berkshire | 12.833 | -0.312 | -2.43 | -0.307 | -2.39 |
| West Sussex | 84.664 | 2.962 | 3.50 | 2.962 | 3.50 |
| Westminster | 31.102 | -0.616 | -1.98 | -0.585 | -1.88 |
| Wigan | 39.101 | -0.345 | -0.88 | -0.349 | -0.89 |
| Wiltshire | 44.510 | 0.420 | 0.94 | 0.415 | 0.93 |
| Windsor and Maidenhead | 13.306 | -0.381 | -2.86 | -0.375 | -2.82 |
| Wirral | 43.674 | -0.400 | -0.92 | -0.413 | -0.94 |
| Wokingham | 9.980 | -0.361 | -3.62 | -0.358 | -3.59 |
| Wolverhampton | 37.654 | -1.525 | -4.05 | -1.525 | -4.05 |
| Worcestershire | 58.393 | 0.215 | 0.37 | 0.204 | 0.35 |
| York | 17.480 | 0.751 | 4.30 | 0.748 | 4.28 |
| Total | 5,871.986 | | | | |