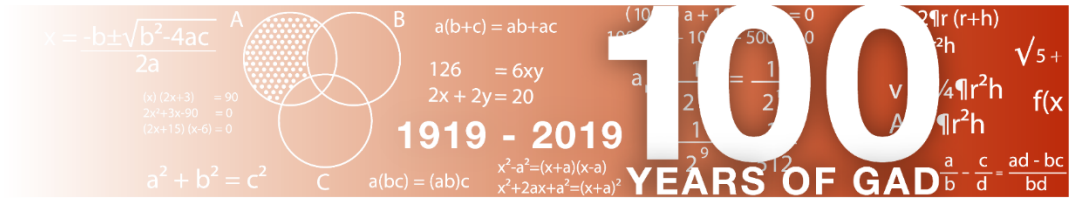




Government
Actuary's
Department



Teachers' Pension Scheme

Late retirements

Final salary section

Factors and guidance

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1 Introduction

- 1.1 This note is provided for the Department for Education (DfE) as scheme manager of the Teachers' Pension Scheme (TPS) and sets out how to determine the appropriate uplift to be applied to a member's benefits in the final salary sections when retiring from active service after normal pension age (NPA).
- 1.2 This guidance does not apply to retirements from deferred status in the final salary sections or to the career average section. Separate guidance will be provided for the career average section.
- 1.3 This guidance is intended to supersede any factors or advice previously issued, for the purposes of late retirement calculations, which rely on input from the Scheme Actuary. In particular, this guidance supersedes:
 - *Teachers' Pension Scheme: Late retirements (NPA 65): Factors and guidance* dated 1 April 2015.
- 1.4 The factors provided in this note have been prepared in light of our advice to the DfE dated 22 February 2018 and 30 October 2018 and its instructions following that advice.
- 1.5 Details of the principal assumptions underlying the factor tables in this guidance are set out in Appendix C.
- 1.6 The Regulations to which this document relates, and the corresponding factors provided, are set out in Appendix A.
- 1.7 A member may have benefits in both the final salary sections and the career average section. For the purposes of calculating a member's late retirement pension, the member's final salary late retirement pension and career average section late retirement pension should be calculated separately using the relevant parts of this guidance and the separate guidance covering late retirement in the career average section.

Implementation and review

- 1.8 The factors contained in this guidance will apply from a date to be determined by DfE. This guidance will apply from the date issued on the cover.
- 1.9 Factors have been updated but the calculation methodology remains unchanged.
- 1.10 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Teachers' Pension Scheme. Any questions concerning the application of the guidance should, in the first instance, be referred to DfE.
- 1.11 In line with best practice and in order to make sure that factors are being used as intended and the instructions are fit for purpose, we suggest that some example calculations are sent to GAD for review.



- 1.12 The factors contained in this guidance will be subject to review periodically. This will depend on external circumstances, for example whenever there is a change in the SCAPE basis; when changes in the actuarial assumptions adopted for other scheme factors take place; or following each future actuarial valuation where mortality and other relevant experience is reviewed or if other credible and material information comes to light.
- 1.13 The remainder of this note covers the factor tables, guidance on their use and a number of worked examples.

Third party reliance

- 1.14 This guidance has been prepared for the use of DfE and the scheme administrators for the purposes of demonstrating the application of the factors covered by this guidance only. This guidance may be published on DfE and the scheme administrator's website but must not otherwise be reproduced, distributed or communicated in whole or in part to any other person without GAD's prior written permission.
- 1.15 Other than DfE and the scheme administrators, no person or third party is entitled to place any reliance on the contents of this guidance, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this guidance, whether or not GAD has agreed to the disclosure of its advice to the third party.



2 Late retirement with actuarial uplift

- 2.1 An uplift is applied to 2007 or later entrants' (NPA 65 members) pensions when retiring from active service after age 65 in accordance with Regulation 61. A similar uplift applies to the NPA 65 pension of persons with mixed service. No uplift is applied to any Additional Pension, pre-2007 entrants' benefits, NPA 60 pension of persons with mixed service or for any retirements from deferred status (although a late retirement uplift is applied to any annual allowance pension debits of an NPA 60 member).
- 2.2 The benefits payable on late retirement are determined by applying the appropriate uplift factor to the relevant benefit entitlement at the date of retirement as follows. The factors are provided in Appendix B.

Pre-2007 entrants (NPA 60 members) retiring after age 60

- 2.3 Late retirement pension =
- NPA 60 main scheme pension
 - + Additional Pension
 - Pension sharing on divorce pension debit(s)
 - Annual allowance pension debit(s) x Factor LR3
- 2.4 Late retirement lump sum =
- NPA 60 scheme lump sum
 - Pension sharing on divorce lump sum debit(s)
 - Annual allowance lump sum debit(s) x Factor LR3
- 2.5 Points to note in using the factors:
- Additional Pension and pension debits need to be revalued to the date of retirement.
 - Late retirement factors should be selected from the appropriate table with reference to a member's age at retirement (in years and complete months).
 - Where an annual allowance pension debit was implemented **after** age 60, an adjustment is required to the annual allowance pension debit line of the formula above. This adjustment is set out in paragraph 2.6.
 - Factors should be applied before any lump sum commutation option is exercised.
- 2.6 Where the annual allowance pension/lump sum debit(s) was implemented **after** age 60, the debit(s) needs to be adjusted to allow for implementation after age 60.
- Annual allowance pension/lump sum debit(s) x Factor LR3 at retirement
÷ Factor LR3 at implementation date



2.7 Example A in Section 3 provides an example calculation for a Pre-2007 entrant with an annual allowance pension debit that was implemented after age 60.

2007 or later entrants (NPA 65 members) retiring after age 65

2.8 Late retirement pension =

- NPA 65 main scheme pension calculated based on service to 65 x Factor LR1
- + NPA 65 main scheme pension for service after age 65
- + Additional Pension
- Pension sharing on divorce pension debit(s) x Factor LR2
- Annual allowance pension debit(s) x Factor LR2

2.9 Points to note in using the factors:

- Additional Pension and pension debits need to be revalued to the date of retirement.
- Late retirement factors should be selected from the appropriate table with reference to a member's age at retirement (in years and complete months).
- Where a member divorced **after** age 65, an adjustment is required to the pension sharing on divorce debit line of the formula above. This adjustment is set out in paragraph 2.10.
- Where an annual allowance pension debit was implemented **after** age 65, an adjustment is required to the annual allowance pension debit line of the formula above. This adjustment is set out in paragraph 2.11.
- Factors should be applied before any lump sum commutation option is exercised.

2.10 Where the member divorced **after** age 65, the pension sharing on divorce pension debit(s) should be split into two elements relating to service before and after age 65. The split should be pro-rata to scheme service at the date of the pension sharing order. A late retirement uplift applies only to the debit relating to service before age 65. The formula above should be modified as follows:

[Pension sharing on divorce pension debit relating to service before age 65 x Factor LR2 at age of retirement ÷ Factor LR2 at age of pension share

+ Pension sharing on divorce pension debit pension relating to service after age 65]

2.11 Where the annual allowance pension debit(s) was implemented **after** age 65, the debit(s) needs to be adjusted to allow for implementation after age 65. The formula above should be modified as follows:

Annual allowance pension debit(s) x Factor LR2 at retirement
÷ Factor LR2 at implementation date



- 2.12 Examples B to D in Section 3 provide example calculations for an NPA 65 member. Example C covers a NPA 65 member with a pension sharing on divorce debit where the divorce occurred before age 65. Example D covers a NPA 65 member with a pension sharing on divorce debit where the divorce occurred after age 65.

Persons with mixed service

- 2.13 Members with mixed service have both NPA 60 pension and NPA 65 pension. Their NPA 60 and NPA 65 pension should be considered separately for the purpose of calculating a member's late retirement pension.
- 2.14 For members with mixed service who are retiring after age 65:
- their NPA 60 late retirement pension should be calculated using the guidance in paragraphs 2.3 to 2.7 above; and
 - their NPA 65 late retirement pension should be calculated using the guidance in paragraphs 2.8 to 2.12 above.
- 2.15 Members with mixed service who are retiring before age 65 will have their NPA 65 benefits reduced for early payment, as they will be taking their benefits before NPA. In this instance:
- their NPA 60 late retirement pension should be calculated using the guidance in paragraphs 2.3 to 2.7 above; and
 - their NPA 65 early retirement pension should be calculated using the early retirements in normal health guidance.¹

¹ *Teachers' Pension Scheme: Final salary sections and career average section: Early retirements in normal health: Factors and guidance* is the guidance that is in force at the time.



3 Examples

- 3.1 This Section sets out a number of worked examples to help illustrate how the factors should be applied. The examples covered are as follows:
- A.** Late retirement of a Pre-2007 entrant with annual allowance pension debit and annual allowance lump sum debit implemented after age 60
 - B.** Late retirement of a 2007 or later entrant
 - C.** Late retirement of a 2007 or later entrant with a pension sharing on divorce pension debit (divorce occurred before age 65)
 - D.** Late retirement of a 2007 or later entrant with a pension sharing on divorce pension debit (divorce occurred after age 65)
- 3.2 In all examples, the member is assumed to be eligible for late retirement.



Example A Late retirement of a NPA 60 member with an annual allowance debit implemented after age 60

Member Details

NPA	60
Sex	Female
Date of birth	10 June 1955
Date annual allowance debit implemented	5 April 2017
Date of retirement	21 October 2019
Age at annual allowance debit implementation	61 years and 9 months
Age at retirement	64 years and 4 months

NPA 60 main scheme pension	£11,000 pa
NPA 60 main scheme lump sum	£33,000
Annual allowance pension debit at retirement	£890 pa
Annual allowance lump sum debit at retirement	£2,670 pa

Factors

Factor table for pension	LR3
Annual allowance debit factor at implementation	1.084
Annual allowance debit factor at retirement	1.225

Pension

Late retirement pension =

NPA 60 main scheme pension

- Annual allowance pension debit x Factor LR3 at retirement ÷ Factor LR3 at implementation date

$$\begin{aligned} \text{Late retirement pension} &= \text{£11,000} \\ &\quad - \text{£890} \times 1.225 \div 1.084 \\ &= \text{£11,000} - \text{£1,005.77} \\ &= \text{£9,994.23 pa} \end{aligned}$$



Lump sum

Late retirement lump sum =

NPA 60 main scheme lump sum

- Annual allowance lump sum debit x Factor LR3 at retirement ÷ Factor LR3 at implementation date

$$\begin{aligned} \text{Late retirement lump sum} &= \text{£33,000} \\ &\quad - \text{£2,670} \times 1.225 \div 1.084 \\ &= \text{£33,000} - \text{£3,017.30} \\ &= \text{£29,982.70} \end{aligned}$$



Example B
Late retirement of a 2007 or later entrant (NPA 65 member)

Member Details

NPA	65
Date of birth	1 June 1950
Date of retirement	1 August 2020
Age at retirement	70 years and 2 months
Pensionable earnings	£14,600
Total service	20 years and 2 months
Service to age 65	15 years
Pension due to service to age 65	£3,650 pa (before uplift)
Service from age 65	5 years and 2 months
Pension due to service from age 65	£1,257 pa

Late Retirement Pension

Factor table	LR1
Pension factor	1.209

Late retirement pension =

NPA 65 main scheme pension calculated based on service to 65 x Factor LR1
+ NPA 65 main scheme pension for service after age 65

$$\begin{aligned} \text{Late retirement pension} &= \text{£}3,650.00 \times 1.209 \\ &\quad + \text{£}1,257 \\ &= \text{£}4,412.85 + \text{£}1,257 \\ &= \text{£}5,669.85 \text{ pa} \end{aligned}$$



Example C

Late retirement of a 2007 or later entrant (NPA 65 member) with a pension sharing on divorce debit (divorce occurred before age 65)

Member Details

NPA	65
Date of birth	1 September 1954
Date of divorce	1 September 2015
Date of retirement	1 September 2020
Age at retirement	66 years and 0 months
Pension accrued before age 65	£6,050 pa
Pension accrued after age 65	£550 pa
Pension sharing on divorce debit at retirement	£2,600 pa

Factors

Factor table for main scheme pension	LR1
Pension factor at retirement age	1.035
Factor table for pension debit	LR2
Pension factor at retirement age	1.058

Pension

Late retirement pension =

- NPA 65 main scheme pension calculated based on service to 65 x Factor LR1
- + NPA 65 main scheme pension for service after age 65
- Pension sharing on divorce pension debit(s) x Factor LR2

$$\begin{aligned} \text{Late retirement pension} &= \quad \quad \quad \text{£6,050} \times 1.035 \\ &\quad \quad \quad + \text{£550} \\ &\quad \quad \quad - \text{£2,600} \times 1.058 \\ &= \quad \quad \quad \text{£6,261.75} + \text{£550} - \text{£2,750.80} \\ &= \quad \quad \quad \text{£4,060.95 pa} \end{aligned}$$



Example D

Late retirement of a 2007 or later entrant (NPA 65 member) with a pension sharing on divorce debit (divorce occurred after age 65)

Member Details

NPA	65
Sex	Female
Date of birth	10 June 1952
Date of divorce	15 September 2018
Date of retirement	21 October 2020
Age at divorce	66 years and 3 months
Age at retirement	68 years and 4 months

Pension accrued before age 65	£12,000 pa
Pension accrued after age 65	£4,000 pa
Debit relating to service before 65	£4,578 pa
Debit relating to service after 65	£572 pa

Factors

Factor table for main scheme pension	LR1
Pension factor	1.124
Factor table for pension debit	LR2
Pension factor at divorce age	1.073
Pension factor at retirement age	1.208

Pension

Late retirement pension =

- NPA 65 main scheme pension calculated based on service to 65 x Factor LR1
- + NPA 65 scheme pension for service after age 65
- (Pension sharing on divorce pension debit(s) relating to service before age 65 x
Factor LR2 at age of retirement ÷ Factor LR2 at age of pension share)
- Pension sharing on divorce pension debit(s) pension relating to service after age 65

$$\begin{aligned}
 \text{Late retirement pension} &= \text{£}12,000 \times 1.124 \\
 &+ \text{£}4,000.00 \\
 &- (\text{£}4,578 \times 1.208 \div 1.073) \\
 &- \text{£}572.00 \\
 &= \text{£}13,488.00 + \text{£}4,000.00 - \text{£}5,153.98 - 572.00 \\
 &= \text{£}11,762.02 \text{ pa}
 \end{aligned}$$



Appendix A: Regulations to which this document relates and corresponding factors

Factor Table Number	Regulation (The Teachers' Pensions Regulations 2010 – SI 2010/990)
LR1 (Spreadsheet table number 410) <ul style="list-style-type: none">• pension uplift factors• NPA 65• applicable to NPA 65 main scheme pension	61 Annual rate of phased retirement and retirement pension
LR2 (Spreadsheet table number 411) <ul style="list-style-type: none">• pension uplift factors• NPA 65• applicable to NPA 65 pension debits	61 Annual rate of phased retirement and retirement pension
LR3 (Spreadsheet table number 412) <ul style="list-style-type: none">• pension and lump sum uplift factors• NPA 60• applicable to NPA 60 annual allowance debits	61 Annual rate of phased retirement and retirement pension



Appendix B: Late retirement factor tables

Table LR1

Benefits payable to the member on late retirement (with actuarial uplift)

Final salary section, NPA 65 members, Main scheme pension

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
65	1.001	1.004	1.007	1.010	1.012	1.015	1.018	1.021	1.023	1.026	1.029	1.032
66	1.035	1.038	1.041	1.044	1.047	1.049	1.052	1.055	1.058	1.061	1.064	1.067
67	1.071	1.074	1.077	1.080	1.084	1.087	1.090	1.093	1.097	1.100	1.103	1.106
68	1.110	1.113	1.117	1.121	1.124	1.128	1.131	1.135	1.138	1.142	1.146	1.149
69	1.153	1.157	1.161	1.165	1.169	1.172	1.176	1.180	1.184	1.188	1.192	1.196
70	1.200	1.204	1.209	1.213	1.217	1.222	1.226	1.230	1.234	1.239	1.243	1.247
71	1.252	1.256	1.261	1.266	1.271	1.275	1.280	1.285	1.289	1.294	1.299	1.304
72	1.308	1.314	1.319	1.324	1.329	1.334	1.339	1.345	1.350	1.355	1.360	1.365
73	1.371	1.376	1.382	1.388	1.393	1.399	1.405	1.410	1.416	1.422	1.427	1.433
74	1.439	1.445	1.452	1.458	1.464	1.470	1.477	1.483	1.489	1.495	1.502	1.508
75	1.511											

- Notes:
- 1) These factors are to be used for calculating the actuarial uplift on late retirement for NPA 65 main scheme benefits
 - 2) Factors are to be applied to pension calculated based on service accrued to age 65 and final pensionable pay at date of exit
 - 3) Benefits to be awarded are obtained by multiplying the benefits calculated as in note 2) by the relevant factor then adding on the unadjusted benefits accrued after age 65
 - 4) Increased benefits are to be calculated before any lump sum commutation option is exercised



Table LR2
Benefits payable to the member on late retirement (with actuarial uplift)
Final salary section, NPA 65 members, Pension debits

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
65	1.002	1.007	1.012	1.016	1.021	1.025	1.030	1.035	1.039	1.044	1.048	1.053
66	1.058	1.063	1.068	1.073	1.078	1.083	1.088	1.093	1.098	1.103	1.108	1.113
67	1.118	1.124	1.129	1.135	1.140	1.146	1.151	1.157	1.162	1.168	1.173	1.179
68	1.184	1.190	1.196	1.202	1.208	1.214	1.220	1.226	1.232	1.238	1.244	1.250
69	1.257	1.263	1.270	1.277	1.283	1.290	1.296	1.303	1.310	1.316	1.323	1.329
70	1.336	1.344	1.351	1.358	1.365	1.373	1.380	1.387	1.394	1.402	1.409	1.416
71	1.424	1.432	1.440	1.448	1.456	1.464	1.472	1.480	1.488	1.496	1.504	1.512
72	1.520	1.529	1.538	1.547	1.556	1.565	1.574	1.582	1.591	1.600	1.609	1.618
73	1.627	1.637	1.647	1.656	1.666	1.676	1.686	1.696	1.705	1.715	1.725	1.735
74	1.745	1.756	1.767	1.778	1.789	1.799	1.810	1.821	1.832	1.843	1.854	1.865
75	1.870											

- Notes:
- 1) These factors are to be used for calculating the actuarial uplift on late retirement for NPA 65 pension debits
 - 2) Factors are to be applied to pension debits revalued to the date of retirement in accordance with the PI Act
 - 3) If divorce occurred after 65:
 - > Only pension sharing on divorce debits related to service before age 65 should be uplifted
 - > The pension debit should be multiplied by the factor for the age at retirement and divided by the factor for the age at divorce
 - 4) If the annual allowance debit was implemented after age 65 then the pension debit should be multiplied by the factor for the age at retirement and divided by the factor for the age at implementation
 - 5) Increased debits are to be calculated before any lump sum commutation option is exercised



Table LR3
Benefits payable to the member on late retirement (with actuarial uplift)
Final salary section, NPA 60 members, Annual Allowance Pension and Lump Sum debits

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
60	1.002	1.006	1.009	1.013	1.017	1.021	1.025	1.028	1.032	1.036	1.040	1.044
61	1.048	1.052	1.056	1.060	1.064	1.068	1.072	1.076	1.080	1.084	1.088	1.092
62	1.096	1.101	1.105	1.109	1.114	1.118	1.122	1.127	1.131	1.135	1.140	1.144
63	1.149	1.153	1.158	1.163	1.167	1.172	1.177	1.181	1.186	1.191	1.195	1.200
64	1.205	1.210	1.215	1.220	1.225	1.230	1.235	1.240	1.245	1.250	1.255	1.260
65	1.265	1.271	1.276	1.282	1.287	1.292	1.298	1.303	1.309	1.314	1.319	1.325
66	1.330	1.336	1.342	1.348	1.354	1.359	1.365	1.371	1.377	1.383	1.389	1.394
67	1.400	1.407	1.413	1.419	1.426	1.432	1.438	1.444	1.451	1.457	1.463	1.469
68	1.476	1.483	1.490	1.496	1.503	1.510	1.517	1.523	1.530	1.537	1.544	1.551
69	1.558	1.565	1.572	1.580	1.587	1.594	1.602	1.609	1.616	1.624	1.631	1.638
70	1.646	1.654	1.662	1.670	1.678	1.686	1.694	1.702	1.710	1.718	1.726	1.734
71	1.742	1.751	1.759	1.768	1.777	1.785	1.794	1.803	1.811	1.820	1.829	1.837
72	1.846	1.856	1.865	1.874	1.884	1.893	1.903	1.912	1.922	1.931	1.940	1.950
73	1.960	1.970	1.980	1.991	2.001	2.011	2.021	2.032	2.042	2.052	2.062	2.073
74	2.083	2.095	2.106	2.117	2.128	2.140	2.151	2.162	2.173	2.184	2.196	2.207
75	2.212											

- Notes :
- 1) These factors are to be used for calculating the actuarial uplift on late retirement for NPA 60 annual allowance pension and lump sum debits
 - 2) Factors are to be applied to pension and lump sum debits revalued to the date of retirement in accordance with the PI Act
 - 3) If the annual allowance debit was implemented after age 60 the pension and lump sum debits should be multiplied by the factor for the age at retirement and divided by the factor for the age at implementation
 - 4) Increased debits are to be calculated before any lump sum commutation option is exercised



Appendix C: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448% pa
CPI	2.00% pa
Long term earnings growth	4.20% pa
Real discount rate (in excess of CPI)	2.40% pa
Real discount rate (in excess of general earnings growth)	0.24% pa

Mortality assumptions

Base mortality tables and adjustments

Male members	106% of S2NMA_L (as per 2016 valuation)
Female members	Age dependent adjustments to S1NFA_L (as per 2016 valuation): 75% up to age 79 86% at ages 80 to 84 100% at ages 85 to 89 108% from age 90

Future mortality improvements	Based on ONS principal UK population projections 2016
Year of Use	2020

Other assumptions

Proportion of male members for unisex factors	30%
Allowance for commutation	Nil other than for mandatory lump sum cases



Appendix D: Limitations

- D.1 This guidance should not be used for any purpose other than those set out in this guidance.
- D.2 The factors contained in this guidance are subject to regular review. Scheme managers and administrators need to ensure that they are using the latest factors, as relevant, when processing cases.
- D.3 Advice provided by GAD must be taken in context and is intended to be considered in its entirety. Individual sections, if considered in isolation, may be misleading, and conclusions reached by a review of some sections on their own may be incorrect. GAD does not accept responsibility for advice that is altered or used selectively. Clarification should be sought if there is any doubt about the intention or scope of advice provided by GAD.
- D.4 This guidance only covers the actuarial principles around the calculation and application of late retirement factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- D.5 Scheme managers and administrators should satisfy themselves that late retirement calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- D.6 This guidance is based on the Regulations in force at the time of writing. It is possible that future changes to the Regulations might create inconsistencies between this guidance and the Regulations. If users of this guidance believe there to be any such inconsistencies, they should bring this to the attention of DfE and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.