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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 reduction to be applied to a member's benefits when retiring early in normal health.
- 1.2 This guidance is intended to supersede any factors or advice previously issued, for the purposes of early retirement calculations, which rely on input from the Scheme Actuary. In particular, this guidance supersedes:
 - *Teachers' Pension Scheme: Early retirements in normal health: Factors and guidance* dated 10 February 2015.
- 1.3 The factors provided in this note have been prepared in light of our advice to DfE dated 22 February 2018 and 30 October 2018 and its instructions following that advice.
- 1.4 Details of the principal assumptions underlying the factor tables in this guidance are set out in Appendix D.
- 1.5 The regulations to which this document relates, and the corresponding factors provided, are set out in Appendix A.
- 1.6 A member may have benefits in both the final salary sections and the career average section. For the purposes of calculating a member's early retirement pension before any commutation option is exercised, the member's final salary early retirement pension and career average section early retirement pension should be calculated separately using the relevant parts of this guidance.

Exclusions

- 1.7 This note covers early retirements in normal health only. In particular, this note does not cover enhancements to be applied in the cases of early retirement in ill health.

Implementation and review

- 1.8 The factors set out in Appendix B of this guidance note relate to the Final Salary sections of the Teachers' Pension Scheme. These factors are to be implemented from a date to be determined by DfE. The factors set out in Appendix C of this note relate to the Career Average section of the Teachers' Pension Scheme. GAD have determined that these factors are to be implemented from 6 December 2018. 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. These are provided separately for the final salary and career average sections of the scheme.

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 Early retirement with actuarial reduction – final salary sections

General information

- 2.1 These factors are used to reduce the benefits of final salary section members who wish to retire before their normal pension age.
- 2.2 This section refers only to benefits payable in accordance with Regulations 61, 62, 73, 75, 81 and 105 of the Teachers' Pension Regulations 2010 (SI 2010/990), that is those Regulations relating to the early payment of main scheme benefits, Additional Pension, admitted service benefits and pension credits of final salary section members.
- 2.3 The benefits payable on early retirement are determined by applying the appropriate reduction factor to the accrued benefit entitlement(s) at the date of retirement using the formula below and factors in the Appendix B.
- 2.4 Worked examples are provided in Section 3.

Pre-2007 entrants

Active or deferred members below age 60 at retirement

- 2.5 Early retirement pension =
Main scheme pension x Factor ER1
+ Additional Pension (option exercised on or before 22 June 2010) x Factor ER2
+ Additional Pension (option exercised after 22 June 2010) x Factor ER3
- pension debit(s) pension x Factor ER1
- 2.6 Early retirement lump sum =
Main scheme lump sum x Factor ER1
- pension debit(s) lump sum x Factor ER1
- 2.7 Points to note in using factors:
 - Main scheme pension and lump sum includes any transferred-in, added years' and admitted service pension and lump sum.
 - Additional Pension and pension debits need to be revalued to the date of retirement.
 - The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).
 - Reduced benefits should be calculated before commutation option is exercised.



Pre-2007 entrants

Active members aged between 60 and 65 at retirement with NPA 65 Additional Pension

- 2.8 Pre-2007 entrants who have already reached the age of 60 can purchase Additional Pension with a normal pension age of 65. Where the Additional Pension comes into payment before age 65, it should be reduced for early payment by multiplying by the appropriate factor from Table ER5 (where the option was exercised on or before 22 June 2010) or Table ER6 (where the option was exercised after 22 June 2010).
- 2.9 No adjustments for early retirement are to be made to other elements of the pension.

2007 or later entrants

Early retirement of active or deferred members

- 2.10 Early retirement pension =
- Main scheme pension x Factor ER4
 - + Additional Pension (option exercised on or before 22 June 2010) x Factor ER5
 - + Additional Pension (option exercised after 22 June 2010) x Factor ER6
 - pension debit(s) pension x Factor ER4
- 2.11 Points to note in using factors:
- Main scheme pension includes any transferred-in service.
 - Additional Pension and pension debits need to be revalued to the date of retirement.
 - The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).
 - Reduced benefits should be calculated before any lump sum commutation option is exercised.



Persons with mixed service
Early retirement of active or deferred members

2.12 Early retirement pension =

Main scheme pension (where NPA is 60) x Factor ER1

- + Main scheme pension (where NPA is 65) x Factor ER4
- + Additional Pension (option exercised on or before 22 June 2010 where NPA is 60) x Factor ER2
- + Additional Pension (option exercised on or before 22 June 2010 where NPA is 65) x Factor ER5
- + Additional Pension (option exercised after 22 June 2010 where NPA is 60) x Factor ER3
- + Additional Pension (option exercised after 22 June 2010 where NPA is 65) x Factor ER6
- pension debit(s) pension (where NPA is 60) x Factor ER1
- pension debit(s) pension (where NPA is 65) x Factor ER4

2.13 Early retirement lump sum =

Main scheme lump sum x Factor ER1

- pension debit(s) lump sum x Factor ER1

2.14 Points to note in using factors:

- Main scheme pension and lump sum includes any transferred-in and added years' pension and lump sum with the appropriate NPA.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- The early retirement factors should be selected with reference to a member's age at retirement (in years and complete months).
- Reduced benefits should be calculated before commutation option is exercised.

Allowance for pension debits

2.15 The formulae set out above make explicit allowance for pension debits (which includes annual allowance debits). The pension debits are also reduced to reflect that the pension debit will be in effect for a longer period.

Pension credit members

2.16 Early retirement reductions apply to pension credit members dependent on their NPA. For credit members with NPA 60, the calculation is the same as for a pre-2007 joiner ignoring pension debits and additional pension (paragraph 2.5 and, if a lump sum is payable, paragraph 2.6). For credit members with NPA 65, the calculation is the same as for a 2007 or later entrant (paragraph 2.10).



Eligibility for actuarially reduced early retirement

- 2.17 Actuarially reduced early retirement is not allowed if the reduced main scheme pension in respect of service given on or after 6 April 1978 and on or before 5 April 1997 is expected to be less than a member's guaranteed minimum pension (GMP) at GMP payment age (65 for males and 60 for females).
- 2.18 GMP data is not routinely held by the administrator. Where GMP data is not held, an initial test as described in paragraph 2.19 should be carried out to decide which cases require further investigation. The test in paragraph 2.22 can be carried out directly if GMP data is held.
- 2.19 If the following condition holds then the scheme pension is expected to be greater than the GMP at GMP payment age and no further investigation is required.

$$\frac{\text{final average salary}}{\text{highest FTE salary in the GMP accrual period} \times \text{PI}} > 1.2$$

where:

- final average salary is that used to determine the amount of the scheme benefits
 - highest FTE salary in the GMP accrual period is the highest FTE salary attained between 6 April 1978 and 5 April 1997
 - PI is the pension increase multiplier for the period between (i) the date on which the member first earned the highest FTE salary in the GMP accrual period and (ii) the date which the final average salary relates to.
- 2.20 If the condition in paragraph 2.19 does not hold then the following test should be applied to check whether a member is eligible for actuarially reduced early retirement.
- 2.21 The GMP test is applied to the reduced value of the pension after a member has exercised any commutation option. It may be therefore that actuarially reduced early retirement is permitted but only if no pension is commuted.
- 2.22 The GMP test is set out below:
- Calculate the pension in relation to service before 6 April 1997, excluding any added years but including any (pre-97) transferred-in service and apply the relevant early retirement factor and the reduction for the proposed level of commutation.



- Take revalued annual GMP at date of retirement and apply the relevant factor from the following table.

Number of tax years commencing before GMP payable	Factor
1	1.020
2	1.045
3	1.065
4	1.090
5	1.115
6	1.140
7	1.165
8	1.190
9	1.215
10	1.245

- Early retirement is permitted if the reduced pension is greater than the GMP multiplied by the factor.



3 Examples – final salary sections

- 3.1 This Section sets out a number of worked examples to help illustrate how the factors should be applied for retirements from the final salary sections. The examples covered are as follows:
- A.** Early retirement of a pre-2007 entrant with a NPA 60 Additional Pension contract exercised after 22 June 2010
 - B.** Early retirement of a pre-2007 entrant with a NPA 60 Additional Pension contract exercised on or before 22 June 2010
 - C.** Pre-2007 entrant with a NPA 65 Additional Pension contract exercised after 22 June 2010, retiring before age 65
 - D.** Early retirement of a 2007 or later entrant with an annual allowance debit
- 3.2 In all examples, the member is assumed to be eligible for early retirement.



Example A

Early retirement of a pre-2007 entrant with a NPA 60 Additional Pension contract exercised after 22 June 2010

Member Details

NPA	60
Sex	Male
Date of birth	1 January 1965
Date of retirement	1 August 2020
Age at retirement (years and complete months)	55 years and 7 months
Pension at retirement	£2,000 pa
Lump sum at retirement	£6,000
NPA of Additional Pension (AP)	60
Date of AP election	1 September 2010
Amount of AP purchased	£500 pa

Pension

Main scheme pension

Factor table	ER1
Pension factor	0.831
Reduced main scheme pension	= Accrued main scheme pension x ER1
	= £2,000 x 0.831
	= £1,662.00 pa

Additional pension

Factor table	ER3
Pension factor	0.821
Reduced additional pension	= Paid-up additional pension x ER3
	= £500 x 0.821
	= £410.50 pa

Total reduced pension = £1,662.00 + £410.50 = £2,072.50 pa

Lump Sum

Main scheme lump sum

Factor table	ER1
Lump sum factor	0.831
Reduced lump sum	= Accrued main scheme lump sum x ER1
	= £6,000 x 0.831
	= £4,986.00



Example B

Early retirement of a pre-2007 entrant with a NPA 60 Additional Pension contract exercised on or before 22 June 2010

Member Details

NPA	60
Sex	Female
Date of birth	1 December 1962
Date of retirement	1 April 2020
Age at retirement (years and complete months)	57 years and 4 months
Pension at retirement	£4,500 pa
Lump sum at retirement	£13,500
NPA of Additional Pension (AP)	60
Date of AP election	21 June 2006
Amount of AP purchased	£1,500 pa

Pension

Main scheme pension

Factor table	ER1
Pension factor	0.893
Reduced main scheme pension	= Accrued main scheme pension x ER1
	= £4,500 x 0.893
	= £4,018.50 pa

Additional pension

Factor table	ER2
Pension factor	0.913
Reduced additional pension	= Paid-up additional pension x ER2
	= £1,500 x 0.913
	= £1,369.50 pa

Total reduced pension = £4,018.50 + £1,369.50 = £5,388.00

Lump Sum

Main scheme lump sum

Factor table	ER1
Lump sum factor	0.893
Reduced lump sum	= Accrued main scheme lump sum x ER1
	= £13,500 x 0.893
	= £12,055.50



Example C

Pre-2007 entrant with a NPA 65 Additional Pension contract exercised after 22 June 2010, retiring before age 65

Member Details

NPA	60
Sex	Male
Date of birth	25 July 1960
Date of retirement	22 August 2021
Age at retirement (years and complete months)	61 years and 0 months
Pension at retirement	£6,000 pa
Lump sum at retirement	£18,000
NPA of Additional Pension (AP)	65
Date of AP election	1 September 2014
Amount of AP purchased	£1,500 pa

Pension

Main scheme pension

Factor table	n/a
Pension factor	n/a
Main scheme pension	= Accrued main scheme pension
	= £6,000.00 pa

Additional pension

Factor table	ER6
Pension factor	0.817
Reduced additional pension	= Paid-up additional pension x ER6
	= £1,500 x 0.817
	= £1,225.50 pa

Total reduced pension = £6,000.00 + £1,225.50 = £7,225.50

Lump Sum

Main scheme lump sum

Factor table	n/a
Lump sum factor	n/a
Lump sum	= Accrued main scheme lump sum
	= £18,000.00



Example D

Early retirement of a 2007 or later entrant with an annual allowance debit

Member Details

NPA	65
Sex	Female
Date of birth	1 March 1959
Date of retirement	1 August 2020
Age at retirement (years and complete months)	61 years and 5 months
Pension at retirement	£4,500 pa
Annual allowance debit at retirement	£200 pa

Pension

Main scheme pension

Factor table		ER4
Pension factor		0.834
Reduced main scheme pension	=	Accrued main scheme pension x ER4
	=	£4,500 x 0.834
	=	£3,753.00 pa

Annual allowance debit

Factor table		ER4
Pension factor		0.834
Reduced annual allowance debit	=	Annual allowance debit x ER4
	=	£200 x 0.834
	=	£166.80 pa

Total reduced pension = £3,753.00 - £166.80 = £3,586.20 pa



4 Early retirement with actuarial reduction – career average section

General information

- 4.1 These factors are used to reduce the benefits of career average section members who wish to retire before their normal pension age.
- 4.2 This section refers only to benefits payable in accordance with Regulations 76, 77, 80, 96, 102, 105 and 156 of the Teachers' Pension Regulations 2014 (SI 2014/512), that is those Regulations relating to the early payment of full retirement earned pension benefits, Additional Pension and pension credits of career average section members.
- 4.3 For members retiring early from active service, the standard reduction of 3% a year applies for a maximum of 3 years between age 65 and a member's normal pension age. However, members do have the option to pay contributions to buy out the standard reduction ("buy-out election") for a period of up to 3 years.
- 4.4 DfE have determined that in cases where the standard reduction is to be applied for a non-integer number of years, it is to be calculated as a reduction of 0.25% for each complete month between age 65 (or the member's age at retirement, if later) and the member's normal pension age, up to a maximum of 36 months.
- 4.5 The benefits payable on early retirement from active service are determined by applying the standard reduction (if any) and the appropriate reduction factor (if required) to the accrued benefit entitlement at the date of retirement using the formula in paragraph 4.8 below and factors in the Appendix C.
- 4.6 The benefits payable on early retirement from deferred status are determined by applying the appropriate reduction factor to the accrued benefit entitlement at the date of retirement using the formula in paragraph 4.10 below and factors in the Appendix C. An adjustment to the early retirement reduction is required for those members who made a buy-out election. The formula in paragraph 4.12 should be used for any part of a deferred member's pension that is subject to a buy-out election.
- 4.7 Worked examples are provided in Section 5.



Active members

4.8 Early retirement pension =

$$\begin{aligned} & \text{Full retirement earned pension} \times \text{standard reduction} \times \text{Factor ER7} \\ & + \text{Additional Pension} \times \text{Factor ER8} \\ & - \text{pension debit(s) pension} \times \text{Factor ER8} \end{aligned}$$

4.9 Points to note in using factors:

- Full retirement earned pension includes any transferred-in pension and any extra pension purchased through a faster accrual election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- The standard reduction should be adjusted accordingly if a member has made a buy-out election. If a member revokes, or is taken to revoke, the buy-out election, the election only applies to the pension accrued before the date of the revocation. In such cases, separate calculations are required for the elements of the pension which are and are not covered by the buy-out election, with the total pension payable being the sum of these separate calculations.
- Factor ER7 should be selected with reference to a member's age at retirement (in years and complete months).
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Reduced benefits should be calculated before commutation option is exercised.

Deferred members – pension not subject to a buy-out election

4.10 Early retirement pension =

$$\begin{aligned} & \text{Full retirement earned pension} \times \text{Factor ER8} \\ & + \text{Additional Pension} \times \text{Factor ER8} \\ & - \text{pension debit(s) pension} \times \text{Factor ER8} \end{aligned}$$

4.11 Points to note in using factors:

- Full retirement earned pension includes any transferred-in pension and any extra pension purchased through a faster accrual election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Reduced benefits should be calculated before commutation option is exercised.



Deferred members – pension subject to a buy-out election

4.12 Early retirement pension =

$$\begin{aligned} & \text{Full retirement earned pension} \times [\text{Factor ER8} + \text{standard reduction} \times N \times \text{Factor ER9}] \\ & + \text{Additional Pension} \times \text{Factor ER8} \\ & - \text{pension debit(s)} \times \text{Factor ER8} \end{aligned}$$

where standard reduction is 0.03.

where N is the minimum of:

- the number of years for which the standard reduction has been bought out; and
- the period to the member's NPA (in years and months, with part months rounded up to the nearest month) minus $\frac{1}{24}$.

4.13 Points to note in using factors:

- Full retirement earned pension includes any extra pension purchased through a faster accrual election which is also subject to a buy-out election.
- Additional Pension and pension debits need to be revalued to the date of retirement.
- If a member revokes, or is taken to revoke, the buy-out election, the election only applies to the pension accrued before the date of the revocation. In such cases, separate calculations are required for the elements of the pension which are and are not covered by the buy-out election. The former is covered by paragraph 4.12 and the latter by paragraph 4.10, with the total pension payable being the sum of these separate calculations.
- Factor ER8 should be selected with reference to the period to a member's NPA (in years and months, with part months rounded up to the nearest month).
- Factor ER9 should be selected with reference to a member's age at retirement (in years and complete months).
- Reduced benefits should be calculated before commutation option is exercised.

Allowance for pension debits

- 4.14 The formulae set out above make explicit allowance for pension debits (which includes annual allowance debits). The pension debits are also reduced to reflect that the pension debit will be in effect for a longer period.

Pension credit members

- 4.15 Early retirement reductions apply to pension credit members. Calculation of the early retirement pension for pension credit members follows the same process outlined above for career average section deferred members who did not make a buy-out election (paragraph 4.10).



5 Examples – career average section

- 5.1 This Section sets out a number of worked examples to help illustrate how the factors should be applied for retirements from the career average section. The examples covered are as follows:
- E. Early retirement of an active member with an Additional Pension contract and a pension debit from a pension sharing order on divorce
 - F. Early retirement of an active member who made a buy-out election
 - G. Early retirement of a deferred member who did not make a buy-out election
 - H. Early retirement of a deferred member who made a buy-out election
- 5.2 In all examples, the member is assumed to be eligible for early retirement.



Example E

Early retirement - Active member with an Additional Pension contract and a pension debit from a pension sharing order on divorce

Member Details

NPA	66
Sex	Male
Date of birth	1 April 1960
Date of retirement	1 November 2020
Age at retirement (years and complete months)	60 years and 7 months
Period to NPA (rounded up to the nearest month)	5 years and 5 months

Full retirement earned pension at retirement	£2,000 pa
Amount of AP purchased	£500 pa
Pension debit at retirement	£800 pa

Standard reduction (for age 65 to 66)	3% (or 0.03)
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Pension

As the member is retiring from active service the formula in paragraph 4.8 should be used.

Full retirement earned pension

Factor table	ER7
Pension factor	0.801

$$\begin{aligned} \text{Reduced pension} &= \text{Full retirement earned pension} \times \text{standard reduction} \times \text{Factor ER7} \\ &= £2,000 \times (1 - 0.03) \times 0.801 \\ &= £1,553.94 \text{ pa} \end{aligned}$$

Additional Pension

Factor table	ER8
Pension factor	0.754

$$\begin{aligned} \text{Reduced AP} &= \text{Paid-up Additional Pension} \times \text{Factor ER8} \\ &= £500 \times 0.754 \\ &= £377.00 \text{ pa} \end{aligned}$$

Pension debit

Factor table	ER8
Pension factor	0.754

$$\begin{aligned} \text{Reduced pension debit} &= \text{Pension debit} \times \text{Factor ER8} \\ &= £800 \times 0.754 \\ &= £603.20 \text{ pa} \end{aligned}$$

$$\text{Total reduced pension} = £1,553.94 + £377.00 - £603.20 = £1,327.74$$



Example F

Early retirement - Active member who made a buy-out election

Member Details

NPA	66
Sex	Female
Date of birth	1 September 1957
Date of retirement	1 September 2020
Age at retirement (years and complete months)	63 years and 0 months

Full retirement earned pension at retirement:

Subject to the buy-out election	£1,000 pa
Not subject to the buy-out election	£3,000 pa
Total	£4,000 pa

Standard reduction (for age 65 to 66)	3% (or 0.03)
Number of years for which the standard reduction has been bought out	1

On joining the career average section the member elected to buy-out the standard reduction applying for 1 year. However, the member revoked this option before their retirement date. £1,000 of the full retirement earned pension relates to the period during which the buy-out election was in force and £3,000 relates to the period after the buy-out election was revoked.

Pension

As the member is retiring from active service the formula in paragraph 4.8 should be used.

Full retirement earned pension subject to the buy-out election

Factor table	ER7
Pension factor	0.902

$$\begin{aligned} \text{Reduced pension} &= \text{Full retirement earned pension} \times \text{standard reduction} \times \text{Factor ER7} \\ &= £1,000 \times 1 \times 0.902 \\ &= £902.00 \text{ pa} \end{aligned}$$

Full retirement earned pension not subject to the buy-out election

Factor table	ER7
Pension factor	0.902

$$\begin{aligned} \text{Reduced pension} &= \text{Full retirement earned pension} \times \text{standard reduction} \times \text{Factor ER7} \\ &= £3,000 \times (1-0.03) \times 0.902 \\ &= £2,624.82 \text{ pa} \end{aligned}$$

$$\text{Total reduced pension} = £902.00 + £2,624.82 = £3,526.82$$



Example G

Early retirement - Deferred member who did not make a buy-out election

Member Details

NPA	66
Sex	Male
Date of birth	1 March 1958
Date of retirement	5 June 2020
Period to NPA (rounded up to the nearest month)	3 years and 9 months
Pension at retirement	£5,000 pa

Pension

As the member is retiring from deferred service and did not make a buy-out election, the formula in paragraph 4.10 should be used.

Full retirement earned pension

Factor table	ER8
Pension factor	0.819

Reduced pension = Full retirement earned pension x Factor ER8

$$= £5,000 \times 0.819$$

$$= £4,095.00 \text{ pa}$$



Example H

Early retirement – Deferred member who made a buy-out election

Member Details

NPA	66
Sex	Female
Date of birth	1 November 1959
Date of retirement	1 November 2021
Age at retirement (years and complete months)	62 years and 0 months
Period to NPA (rounded up to the nearest month)	4 years and 0 months

Full retirement earned pension at retirement:

Subject to the buy-out election	£1,500 pa
Not subject to the buy-out election	£1,000 pa
Total	£2,500 pa

Standard reduction (65 to 66)	3% (or 0.03)
Number of years for which the standard reduction has been bought out	1

On joining the career average section the member elected to buy-out the standard reduction applying for 1 year. However, the member revoked this option before leaving active service. £1,500 of the full retirement earned pension relates to the period during which the buy-out election was in force and £1,000 relates to the period after the buy-out election was revoked.

Pension

Full retirement earned pension subject to the buy-out election

As the member is retiring from deferred service the formula in paragraph 4.12 should be used for that part of the member's pension that is subject to the buy-out election.

Reduced pension = Full retirement earned pension x [Factor ER8 + standard reduction x N x Factor ER9]

where N is the minimum of:

- the number of years for which the standard reduction has been bought out; and
- the period to the member's NPA (in years and months, with part months rounded up to the nearest month) minus $\frac{1}{24}$.

Factor table	ER8
Pension factor	0.808

N	= minimum of (1 , $4 - \frac{1}{24}$)
	= minimum of (1 , $3^{\frac{23}{24}}$)
	= 1

Factor table	ER9
Pension factor	0.858
Standard reduction	0.03



Reduced pension = Full retirement earned pension x [Factor ER8 + standard reduction x N x Factor ER9]

$$= £1,500 \times [0.808 + 0.03 \times 1 \times 0.858]$$

$$= £1,250.61 \text{ pa}$$

Full retirement earned pension not subject to the buy-out election

As the member is retiring from deferred service the formula in paragraph 4.10 should be used for that part of the member's pension that is not subject to the buy-out election.

Factor table
Pension factor

ER8
0.808

Reduced pension = Full retirement earned pension x Factor ER8

$$= £1,000 \times 0.808$$

$$= £808.00 \text{ pa}$$

Total reduced pension = £1,250.61 + £808.00 = £2,058.61 pa



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

Final salary section

Factor Table Number	Regulation (The Teachers' Pensions Regulations 2010 - SI 2010/990)
<p>ER1 (Spreadsheet table number 401)</p> <ul style="list-style-type: none"> • pension and lump sum reduction factors • Normal Pension Age (NPA) 60 • applicable to NPA 60 main scheme pension and lump sum, including any pension debits • retirement from active or deferred status 	<p>61 Annual rate of phased retirement and retirement pension</p> <p>62 Amount of phased retirement and retirement lump sum</p> <p>81 Annual rate of admitted service pension and amount of admitted service lump sum</p> <p>105 Pension credit retirement benefits</p>
<p>ER2 (Spreadsheet table number 402)</p> <ul style="list-style-type: none"> • pension reduction factors • NPA 60 • applicable to NPA 60 Additional Pension (contracts exercised on or before 22 June 2010) 	<p>73 Election to receive additional pension with phased retirement pension</p> <p>75 Additional pension paid with retirement pension</p>
<p>ER3 (Spreadsheet table number 403)</p> <ul style="list-style-type: none"> • pension reduction factors • NPA 60 • applicable to NPA 60 Additional Pension (contracts exercised after 22 June 2010) 	<p>73 Election to receive additional pension with phased retirement pension</p> <p>75 Additional pension paid with retirement pension</p>
<p>ER4 (Spreadsheet table number 404)</p> <ul style="list-style-type: none"> • pension reduction factors • NPA 65 • applicable to NPA 65 main scheme pension, including any pension debits • retirement from active or deferred status 	<p>61 Annual rate of phased retirement and retirement pension</p> <p>105 Pension credit retirement benefits</p>
<p>ER5 (Spreadsheet table number 405)</p> <ul style="list-style-type: none"> • pension reduction factors • NPA 65 • applicable to NPA 65 Additional Pension (contracts exercised on or before 22 June 2010) 	<p>73 Election to receive additional pension with phased retirement pension</p> <p>75 Additional pension paid with retirement pension</p>
<p>ER6 (Spreadsheet table number 406)</p> <ul style="list-style-type: none"> • pension reduction factors • NPA 65 • applicable to NPA 65 Additional Pension (contracts exercised after 22 June 2010) 	<p>73 Election to receive additional pension with phased retirement pension</p> <p>75 Additional pension paid with retirement pension</p>



Career average section

Factor Table Number	Regulation (The Teachers' Pension Scheme Regulations 2014 – SI2014/512)
<p>ER7 (Spreadsheet table number 407)</p> <ul style="list-style-type: none"> • pension reduction factors • all NPAs • applicable to career average section pension • retirement from active status only 	<p>76 Pension accounts for active or deferred members who become pensioner members</p> <p>77 Pension accounts for phased retirement members</p> <p>96 Annual rate of phased retirement pension</p> <p>102 Annual rate of premature retirement pension</p> <p>105 Annual rate of early retirement pension</p>
<p>ER8 (Spreadsheet table number 408)</p> <ul style="list-style-type: none"> • pension reduction factors • all NPAs • applicable to career average section pension • retirement from deferred status – full retirement earned pension • retirement from active or deferred status - Additional Pension and pension debits • retirement of a pension credit member 	<p>76 Pension accounts for active or deferred members who become pensioner members</p> <p>77 Pension accounts for phased retirement members</p> <p>80 Pension credit member's pension account</p> <p>96 Annual rate of phased retirement pension</p> <p>102 Annual rate of premature retirement pension</p> <p>105 Annual rate of early retirement pension</p> <p>156 Annual rate of pension credit retirement pension</p>
<p>ER9 (Spreadsheet table number 409)</p> <ul style="list-style-type: none"> • pension reduction factors • all NPAs • applicable to career average section pension • retirement from deferred status – pension subject to a buy-out election 	<p>76 Pension accounts for active or deferred members who become pensioner members</p> <p>105 Annual rate of early retirement pension</p>



Appendix B: Early retirement factor tables – final salary sections

Table ER1

Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)

Final Salary Section, NPA 60 members, Main Scheme Pension and Lump Sum

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.811	0.814	0.817	0.819	0.822	0.825	0.828	0.831	0.833	0.836	0.839	0.842
56	0.845	0.848	0.851	0.854	0.856	0.859	0.862	0.865	0.868	0.871	0.874	0.877
57	0.880	0.883	0.887	0.890	0.893	0.896	0.899	0.902	0.906	0.909	0.912	0.915
58	0.918	0.922	0.925	0.928	0.932	0.935	0.938	0.942	0.945	0.949	0.952	0.955
59	0.959	0.962	0.966	0.969	0.973	0.977	0.980	0.984	0.987	0.991	0.995	0.998
60	1.000											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 main scheme benefits
 - 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 - 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER2

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

Final salary section, NPA 60 members, Additional Pension, contract exercised on or before 22 June 2010

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.847	0.849	0.851	0.854	0.856	0.858	0.860	0.863	0.865	0.867	0.869	0.872
56	0.874	0.876	0.879	0.881	0.883	0.886	0.888	0.891	0.893	0.895	0.898	0.900
57	0.903	0.905	0.908	0.910	0.913	0.916	0.918	0.921	0.923	0.926	0.928	0.931
58	0.934	0.936	0.939	0.942	0.944	0.947	0.950	0.953	0.955	0.958	0.961	0.964
59	0.966	0.969	0.972	0.975	0.978	0.981	0.984	0.987	0.990	0.993	0.996	0.999
60	1.000											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 Additional Pension where contracts were exercised on or before 22 June 2010
 - 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 - 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
 - 4) Factors allow for increases based on RPI before coming into payment and PI Act increases in payment



Table ER3

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

NPA 60 members, Additional Pension, contract exercised after 22 June 2010

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.801	0.804	0.807	0.810	0.813	0.816	0.818	0.821	0.824	0.827	0.830	0.833
56	0.836	0.839	0.842	0.845	0.848	0.852	0.855	0.858	0.861	0.864	0.867	0.870
57	0.873	0.877	0.880	0.883	0.887	0.890	0.893	0.897	0.900	0.903	0.907	0.910
58	0.913	0.917	0.920	0.924	0.928	0.931	0.935	0.938	0.942	0.945	0.949	0.952
59	0.956	0.960	0.964	0.968	0.971	0.975	0.979	0.983	0.987	0.990	0.994	0.998
60	1.000											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 60 Additional Pension where contracts were exercised after 22 June 2010
 - 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 - 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
 - 4) Factors allow for increases based on the PI Act both prior to and in payment



Table ER4

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

Final Salary Section, NPA 65 members, Main Scheme Pension

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.625	0.627	0.629	0.632	0.634	0.636	0.638	0.641	0.643	0.645	0.647	0.649
56	0.652	0.654	0.657	0.659	0.661	0.664	0.666	0.669	0.671	0.673	0.676	0.678
57	0.681	0.683	0.686	0.688	0.691	0.693	0.696	0.698	0.701	0.703	0.706	0.709
58	0.711	0.714	0.717	0.719	0.722	0.725	0.728	0.730	0.733	0.736	0.739	0.741
59	0.744	0.747	0.750	0.753	0.756	0.759	0.762	0.765	0.768	0.771	0.773	0.776
60	0.779	0.783	0.786	0.789	0.792	0.795	0.798	0.801	0.805	0.808	0.811	0.814
61	0.817	0.821	0.824	0.828	0.831	0.834	0.838	0.841	0.845	0.848	0.851	0.855
62	0.858	0.862	0.866	0.869	0.873	0.877	0.880	0.884	0.888	0.891	0.895	0.899
63	0.902	0.906	0.910	0.914	0.918	0.922	0.926	0.930	0.934	0.938	0.942	0.946
64	0.950	0.955	0.959	0.963	0.968	0.972	0.976	0.981	0.985	0.989	0.994	0.998
65	1.000											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 main scheme benefits
 - 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 - 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER5

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

Final Salary Section, NPA 65 members, Additional Pension, contract exercised on or before 22 June 2010

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.699	0.700	0.702	0.704	0.706	0.708	0.710	0.711	0.713	0.715	0.717	0.719
56	0.721	0.722	0.724	0.726	0.728	0.730	0.732	0.734	0.736	0.738	0.740	0.742
57	0.744	0.746	0.748	0.750	0.752	0.754	0.756	0.758	0.760	0.763	0.765	0.767
58	0.769	0.771	0.773	0.775	0.778	0.780	0.782	0.784	0.787	0.789	0.791	0.793
59	0.795	0.798	0.800	0.803	0.805	0.807	0.810	0.812	0.814	0.817	0.819	0.821
60	0.824	0.826	0.829	0.832	0.834	0.837	0.839	0.842	0.844	0.847	0.849	0.852
61	0.854	0.857	0.860	0.863	0.865	0.868	0.871	0.873	0.876	0.879	0.882	0.884
62	0.887	0.890	0.893	0.896	0.899	0.902	0.905	0.908	0.911	0.914	0.916	0.919
63	0.922	0.926	0.929	0.932	0.935	0.938	0.941	0.945	0.948	0.951	0.954	0.957
64	0.961	0.964	0.967	0.971	0.974	0.978	0.981	0.985	0.988	0.991	0.995	0.998
65	1.000											

- Notes: 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 Additional Pension where contracts were exercised on or before 22 June 2010
 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
 4) Factors allow for increases based on RPI before coming into payment and PI Act increases in payment



Table ER6

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

Final Salary Section, NPA 65 members, Additional Pension, contract exercised after 22 June 2010

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.625	0.627	0.629	0.632	0.634	0.636	0.638	0.641	0.643	0.645	0.647	0.649
56	0.652	0.654	0.657	0.659	0.661	0.664	0.666	0.669	0.671	0.673	0.676	0.678
57	0.681	0.683	0.686	0.688	0.691	0.693	0.696	0.698	0.701	0.703	0.706	0.709
58	0.711	0.714	0.717	0.719	0.722	0.725	0.728	0.730	0.733	0.736	0.739	0.741
59	0.744	0.747	0.750	0.753	0.756	0.759	0.762	0.765	0.768	0.771	0.773	0.776
60	0.779	0.783	0.786	0.789	0.792	0.795	0.798	0.801	0.805	0.808	0.811	0.814
61	0.817	0.821	0.824	0.828	0.831	0.834	0.838	0.841	0.845	0.848	0.851	0.855
62	0.858	0.862	0.866	0.869	0.873	0.877	0.880	0.884	0.888	0.891	0.895	0.899
63	0.902	0.906	0.910	0.914	0.918	0.922	0.926	0.930	0.934	0.938	0.942	0.946
64	0.950	0.955	0.959	0.963	0.968	0.972	0.976	0.981	0.985	0.989	0.994	0.998
65	1.000											

- Notes: 1) These factors are to be used for calculating the actuarial reduction on early retirement for NPA 65 Additional Pension where contracts were exercised after 22 June 2010
 2) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 3) Reduced benefits are to be calculated before any lump sum commutation option is exercised
 4) Factors allow for increases based on the PI Act for both prior to and in payment



Appendix C: Early retirement factor tables – career average section

Table ER7

Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)

Career average section, Active members, All NPAs, Full retirement earned pension

Age	Completed Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.625	0.627	0.629	0.632	0.634	0.636	0.638	0.641	0.643	0.645	0.647	0.649
56	0.652	0.654	0.657	0.659	0.661	0.664	0.666	0.669	0.671	0.673	0.676	0.678
57	0.681	0.683	0.686	0.688	0.691	0.693	0.696	0.698	0.701	0.703	0.706	0.709
58	0.711	0.714	0.717	0.719	0.722	0.725	0.728	0.730	0.733	0.736	0.739	0.741
59	0.744	0.747	0.750	0.753	0.756	0.759	0.762	0.765	0.768	0.771	0.773	0.776
60	0.779	0.783	0.786	0.789	0.792	0.795	0.798	0.801	0.805	0.808	0.811	0.814
61	0.817	0.821	0.824	0.828	0.831	0.834	0.838	0.841	0.845	0.848	0.851	0.855
62	0.858	0.862	0.866	0.869	0.873	0.877	0.880	0.884	0.888	0.891	0.895	0.899
63	0.902	0.906	0.910	0.914	0.918	0.922	0.926	0.930	0.934	0.938	0.942	0.946
64	0.950	0.955	0.959	0.963	0.968	0.972	0.976	0.981	0.985	0.989	0.994	0.998
65	1.000											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for career average section benefits
 - 2) These factors apply only to members who are currently in active service seeking to retire early
 - 3) These factors are to be used regardless of a member's NPA
 - 4) These factors need to be used in combination with the standard reduction which applies (for a maximum of 3 years) between age 65 and NPA
 - 5) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor in combination with the standard reduction (if any)
 - 6) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER8

Teachers' Pension Scheme: Actuarial factors

Benefits payable to the member on early retirement (with actuarial reduction)

Career average section – Deferred members, All NPAs, Full retirement earned pension

Career average section – Active and Deferred members, All NPAs, Additional Pension and pension debits

Career average section – Pension credit members, All NPAs

Period to NPA Years	Months											
	0	1	2	3	4	5	6	7	8	9	10	11
0	1.000	0.998	0.993	0.989	0.984	0.979	0.975	0.970	0.966	0.961	0.957	0.952
1	0.947	0.943	0.939	0.935	0.931	0.926	0.922	0.918	0.914	0.910	0.905	0.901
2	0.897	0.893	0.889	0.885	0.882	0.878	0.874	0.870	0.866	0.862	0.858	0.855
3	0.851	0.847	0.844	0.840	0.837	0.833	0.829	0.826	0.822	0.819	0.815	0.812
4	0.808	0.805	0.802	0.798	0.795	0.792	0.788	0.785	0.782	0.779	0.775	0.772
5	0.769	0.766	0.763	0.760	0.757	0.754	0.751	0.748	0.745	0.741	0.738	0.735
6	0.732	0.729	0.727	0.724	0.721	0.718	0.715	0.713	0.710	0.707	0.704	0.701
7	0.699	0.696	0.693	0.691	0.688	0.685	0.683	0.680	0.678	0.675	0.672	0.670
8	0.667	0.665	0.662	0.660	0.657	0.655	0.652	0.650	0.648	0.645	0.643	0.640
9	0.638	0.635	0.633	0.631	0.629	0.626	0.624	0.622	0.620	0.617	0.615	0.613
10	0.610	0.608	0.606	0.604	0.602	0.600	0.598	0.596	0.593	0.591	0.589	0.587
11	0.585	0.583	0.581	0.579	0.577	0.575	0.573	0.571	0.569	0.567	0.565	0.563
12	0.561	0.559	0.557	0.555	0.553	0.551	0.550	0.548	0.546	0.544	0.542	0.540
13	0.538											

- Notes:
- 1) These factors are to be used for calculating the actuarial reduction on early retirement for career average section benefits
 - 2) These factors apply to deferred members or pension credit members seeking to retire early
 - 3) These factors are to be used for any Additional Pension and pension debits an active or deferred member may have
 - 4) Factors should be selected with reference to the period to the member's NPA (in years and months, with part months rounded up to the nearest month.)
 - 5) Benefits to be awarded are obtained by multiplying the accrued benefits by the relevant factor
 - 6) For those members who made a buy-out election, the factors above need to be used in combination with factor Table ER9 in line with GAD guidance
 - 7) Reduced benefits are to be calculated before any lump sum commutation option is exercised



Table ER9

**Teachers' Pension Scheme: Actuarial factors
Benefits payable to the member on early retirement (with actuarial reduction)**

Career average section, Deferred members, All NPAs, Full retirement earned pension subject to a buy-out election

Age	Months											
	0	1	2	3	4	5	6	7	8	9	10	11
55	0.625	0.627	0.629	0.632	0.634	0.636	0.638	0.641	0.643	0.645	0.647	0.649
56	0.652	0.654	0.657	0.659	0.661	0.664	0.666	0.669	0.671	0.673	0.676	0.678
57	0.681	0.683	0.686	0.688	0.691	0.693	0.696	0.698	0.701	0.703	0.706	0.709
58	0.711	0.714	0.717	0.719	0.722	0.725	0.728	0.730	0.733	0.736	0.739	0.741
59	0.744	0.747	0.750	0.753	0.756	0.759	0.762	0.765	0.768	0.771	0.773	0.776
60	0.779	0.783	0.786	0.789	0.792	0.795	0.798	0.801	0.805	0.808	0.811	0.814
61	0.817	0.821	0.824	0.828	0.831	0.834	0.838	0.841	0.845	0.848	0.851	0.855
62	0.858	0.862	0.866	0.869	0.873	0.877	0.880	0.884	0.888	0.891	0.895	0.899
63	0.902	0.906	0.910	0.914	0.918	0.922	0.926	0.930	0.934	0.938	0.942	0.946
64	0.950	0.955	0.959	0.963	0.968	0.972	0.976	0.981	0.985	0.989	0.994	0.998
65	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
66	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
67	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
68	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
69	1.000											

- Notes: 1) These factors are to be used for calculating the actuarial reduction on early retirement for career average section benefits
 2) These factors apply to deferred members who made a buy-out election
 3) These factors are to be used in combination with factor Table ER8 in line with GAD guidance



Appendix D: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448% pa
CPI	2.00% pa
RPI	3.15% pa
Real discount rate (in excess of CPI)	2.40% pa
Real discount rate (in excess of RPI)	1.25% 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 E: Limitations

- E.1 This guidance should not be used for any purpose other than those set out in this guidance.
- E.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.
- E.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.
- E.4 This guidance only covers the actuarial principles around the calculation and application of early retirement factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- E.5 Scheme managers and administrators should satisfy themselves that early retirement calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- E.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.