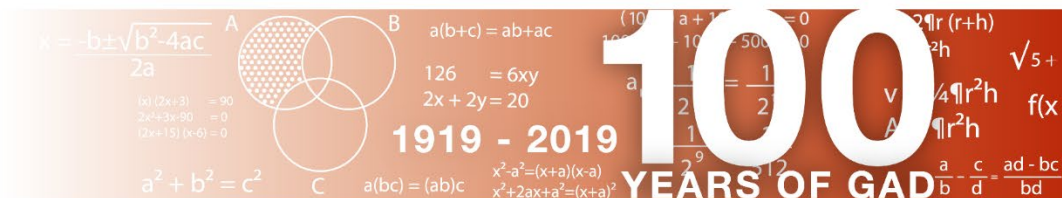




Government
Actuary's
Department



Northern Ireland Teachers' Pension Scheme

Final salary sections and career average section

Cash equivalent transfer values (CETVs)

Factors and guidance

Date: 2 February 2020



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1 Introduction

- 1.1 This note is provided for the Department of Education Northern Ireland (DENI) as scheme manager of the Northern Ireland Teachers' Pension Scheme (NITPS). These tables should be used to calculate the cash equivalent transfer value (CETV) of a deferred pension from the NITPS. These tables should not be used to calculate the amount of a Club transfer value.
- 1.2 A cash equivalent may be paid by the scheme to another pension scheme in accordance with regulation F17 of the Teachers' Superannuation Regulations (Northern Ireland) 1998 (SR 1998/333) and regulation 203 of The Teachers' Pension Scheme Regulations (Northern Ireland) 2014 (SR 2014/310).
- 1.3 The factors provided in this note have been prepared in light of our advice to DENI dated 30 October 2018 and its instructions following that advice.
- 1.4 This guidance is intended to supersede any previously issued by GAD for the purposes of calculating CETVs, carried out from 29 October 2018. No advice or factors issued in the past should be used for CETV cases after this date. In particular, this guidance supersedes:

"Northern Ireland Teachers' Pension Scheme – Final salary sections and career average section: Cash Equivalent Transfer Values (CETVs) – Factors and guidance" dated 12 May 2015.
- 1.5 The formulae for calculating CETVs (i.e. values of non-Club transfers out) are set out in the following sections:
 - section 2 covers the calculation of a CETV for a member's deferred pension in the final salary sections
 - section 3 covers the calculation of a CETV for a member's deferred pension in the career average section that is not subject to a buy-out election
 - section 4 covers the calculation of a CETV for a member's deferred pension in the career average section that is subject to a buy-out election.
 - section 5 covers the calculation of a CETV for a member's deferred Additional Pension.
- 1.6 The factor tables are provided in Appendix A. A summary of the assumptions underlying the CETV factors is given in Appendix B. Some important limitations are set out in Appendix C.
- 1.7 A member may have benefits in both the final salary sections and the career average section. The CETV for the member's final salary and career average section benefits should be calculated separately using the relevant sections of this guidance.
- 1.8 A member may have a deferred Additional Pension. The CETVs for the member's standard NITPS benefits and Additional Pension should be calculated separately using the relevant sections of this guidance.



- 1.9 There may be instances where part of a member's career average pension is subject to a buy-out election and part of their pension is not, for example where a member has revoked the election but continued in pensionable service after this time. The CETV for the different parts of the member's pension should be calculated separately using the relevant sections of this guidance.
- 1.10 A member may have a pension debit following a pension sharing order. Two calculations should be carried out to generate the CETV for the full pension and the CETV for the pension debit, using the relevant section(s) of this guidance. The CETV payable to the member is the CETV for the full pension minus the CETV for the pension debit.
- 1.11 The previous version of this guidance note included calculation methodology to allow administrators to value the accrued GMP, typically for use in cases where the value of the GMP was to be quoted separately or liability for the GMP was to be retained within the NITPS scheme. Factor table 003 was provided for this purpose. We understand that there is no longer a requirement to provide the value of the GMP on transfer values and therefore we have not included the calculation methodology or factors in this guidance. Please contact GAD if a GMP value is required for a particular case.

Exclusions and Scope

- 1.12 This Note should not be used for Club transfer values, bulk transfer cases, members who are active or deferred and above their Normal Pension Age or for members with benefits in payment. Separate guidance has been provided relating to cash equivalent transfer calculations for Club transfers, member over their NPA or members whose pension is already in payment. Please consult the appropriate guidance note for further details.
- 1.13 The factors set out in this Note are different from those made under the terms of the Public Sector Transfer Club.
- 1.14 In previous factors and guidance, an adjustment was applied to GMP to reflect the inflationary increases on the GMP, which were the responsibility of the State Scheme after GMP Payment Age. Following the requirement to equalise GMPs as set out in our letter "GMP Equalisation: Calculations involving actuarial factors" dated 12 August 2019, the GMP adjustment factor has been removed from the calculation methodology for all members reaching State Pension age after 6 April 2016 with effect from the date of receipt of this guidance note.
- 1.15 Our understanding of the usual transitional arrangements is that quotes are made using factors effective at that time. Therefore, where calculations are carried out before the date of receipt of this guidance note we would expect the following to apply:
- If the member replies within the guarantee period and before the implementation date, the original quote is honoured including the adjustment applied to GMP.



- If the member replies within the guarantee period but after implementation date, the approach most beneficial to member are used.
- If the member replies outside of the guarantee period, the CETV is recalculated. No adjustment is made in respect of GMP.

1.16 Any current cases where a CETV is required for a member with GMP reaching State Pension age before 6 April 2016 should be referred to GAD.

Implementation and Review

- 1.17 The factors contained in this guidance will apply from 29 October 2018. This guidance will apply from the date it is issued.
- 1.18 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Northern Ireland Teachers' Pension Scheme. Any questions concerning the application of the guidance should, in the first instance, be referred to DENI.
- 1.19 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.
- 1.20 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.

Third party reliance

- 1.21 This guidance has been prepared for the use of DENI 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 DENI 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.
- 1.22 Other than DENI 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 Calculating CETVs – final salary sections

- 2.1 The formulae detailed below in paragraph 2.2 should be used to calculate the CETV in respect of a member's benefits in the final salary sections of the scheme.
- 2.2 For calculating CETVs in all cases for members below their normal pension age, the following formula should be used:

$$CETV = \left[P \times F_x^P + LS \times F_x^{LS} + S \times F_x^S - \{NI \times F_x^{NI}\} \right]$$

where:

- P = member's deferred pension at the relevant date
- LS = member's (automatic) deferred lump sum at the relevant date¹
- S = member's deferred survivor's pension at the relevant date
- NI = member's NI modification at the relevant date
- F_x^P = relevant pension factor for a member aged x
- F_x^{LS} = relevant lump sum factor for a member aged x
- F_x^S = relevant survivor's pension factor for a member aged x
- F_x^{NI} = relevant NI modification factor for a member aged x

- 2.3 As the GMP adjustment has been removed, as set out in paragraph 1.14, it is no longer necessary to set out a different approach for calculating CETVs for women aged 60 to 64 who have a normal pension age of 65.

¹ In the NPA 65 section of the scheme, members do not accrue an automatic lump sum. For such members, LS will be zero, and the $LS \times F_x^{LS}$ term of the equation can be omitted.



- 2.4 The relevant factors for the final salary sections, set out in Appendix A, are as follows:
- **Table 103:** CETV factors for men, normal pension age of 60
 - **Table 113:** CETV factors for women, normal pension age of 60
 - **Table 123:** CETV factors for men, normal pension age of 65
 - **Table 133:** CETV factors for women, normal pension age of 65
- 2.5 The factors should be selected with reference to the member's age, sex and normal pension age.



3 Calculating CETVs – career average section, deferred pension is not subject to a buy-out election

3.1 The formulae detailed below in paragraph 3.2 should be used to calculate the CETV in respect of a member's benefits in the career average section, where the deferred pension is not subject to a buy-out election.

3.2 The following formula should be used for calculating CETVs:

$$CETV = \left[P \times F_x^P + S \times F_x^S - \{NI \times F_x^{NI}\} \right]$$

where:

P	= member's deferred pension at the relevant date
S	= member's deferred survivor's pension at the relevant date
NI	= member's NI modification at the relevant date
F_x^P	= relevant pension factor for a member aged x
F_x^S	= relevant survivor's pension factor for a member aged x
F_x^{NI}	= relevant NI modification factor for a member aged x

3.3 As the GMP adjustment has been removed, as set out in paragraph 1.14, it is no longer necessary to set out a different approach for calculating CETVs for women aged between 60 and normal pension age or for men aged between 65 and normal pension age.

3.4 The relevant factors for the career average section, set out in Appendix A, are as follows:

- **Table 123:** CETV factors for men, normal pension age of 65
- **Table 133:** CETV factors for women, normal pension age of 65
- **Table 143:** CETV factors for men, normal pension age of 66
- **Table 153:** CETV factors for women, normal pension age of 66
- **Table 163:** CETV factors for men, normal pension age of 67
- **Table 173:** CETV factors for women, normal pension age of 67
- **Table 183:** CETV factors for men, normal pension age of 68
- **Table 193:** CETV factors for women, normal pension age of 68



- 3.5 The factors should be selected with reference to the member's age, sex and normal pension age².
- 3.6 Where a member has a non-integer normal pension age, then factors should be interpolated using the same method as used for calculating transfer payments for the purposes of The Public Sector Transfer Club.

For example, for a member with a normal pension age of 67 years and 2 months the main pension factor would be:

$$F_x^P(NPA\ 67\ years\ 2\ months) = F_x^P(NPA\ 67) + \{2/12 \times [F_x^P(NPA\ 68) - F_x^P(NPA\ 67)]\}$$

An example of the calculation of a CETV for a member with a non-integer NPA can be found in Section 5.

² Normal pension age is defined as a member's state pension age (or 65, if that is higher) in the career average section. For the purpose of this note, a member's expected NPA in the career average section is as defined in legislation.



4 Calculating CETVs – career average section, deferred pension is subject to a buy-out election

- 4.1 The formulae detailed below in paragraph 4.3 should be used to calculate the CETV in respect of a member's benefits in the career average section, where the deferred pension is subject to a buy-out election.
- 4.2 There may be instances where part of a member's career average pension is subject to a buy-out election and the remaining pension is not. In this case, the part of the CETV relating to the deferred pension that is subject to a buy-out election should be calculated using the formulae in this section. The elements of the CETV relating to the deferred pension which is not subject to a buy-out election should be calculated using the formulae in section 3. The two parts should then be added together to give the total CETV in respect of their career average benefits.
- 4.3 For calculating a CETV in all cases where the career average section deferred pension is subject to a buyout election the following formula should be used:

$$CETV = [P \times F_x^P \times AF_B + S \times F_x^S]$$

where:

- P = member's deferred pension (subject to buy-out election) at the relevant date
- S = member's deferred survivor's pension at the relevant date (this should only be the attaching survivor's pension to the member's pension which is subject to the buy-out election)
- AF_B = relevant adjustment factor from table AF1
- F_x^P = relevant pension factor for a member aged x
- F_x^S = relevant survivor's pension factor for a member aged x
- 4.4 The factors F_x^P and F_x^S should be selected with reference to the member's age, sex and buy-out retirement age. Factor AF_B should be selected with reference to the number of years for which the standard reduction has been bought out.
- 4.5 A member's buy-out retirement age is equal to the member's expected normal pension age³ less the number of years for which the standard reduction has been bought out.

³ Normal pension age is defined as a member's state pension age (or 65, if that is higher) in the career average section. For the purpose of this note, a member's expected NPA in the career average section is as defined in legislation.



- 4.6 The relevant factors for the career average section, set out in Appendix A, are as follows:
- **Table 123:** CETV factors for men, normal pension age of 65
 - **Table 133:** CETV factors for women, normal pension age of 65
 - **Table 143:** CETV factors for men, normal pension age of 66
 - **Table 153:** CETV factors for women, normal pension age of 66
 - **Table 163:** CETV factors for men, normal pension age of 67
 - **Table 173:** CETV factors for women, normal pension age of 67.
- 4.7 A worked example is shown below for a member with benefits in the career average section that is subject to a buy-out election.



5 Example CETV calculations

Example 1 – CETV calculation for a member with a non-integer NPA

Member details

Gender	Female
Date of birth	6 August 1977
Relevant date	1 December 2020
NPA	6 January 2045 (67 years 5 months)
Age last birthday at relevant date	43
Member Pension at relevant date	£2,500 pa
Additional Pension at relevant date	Nil
Survivor's Pension at relevant date	£937.50 pa
Additional Pension at relevant date	Nil

From paragraph 3.6, the CETV factors for a member with a non-integer NPA would be calculated from the following formula:

$$F_x^P(\text{NPA 67 years 5 months}) = F_x^P(\text{NPA 67}) + \{5/12 \times [F_x^P(\text{NPA 68}) - F_x^P(\text{NPA 67})]\}$$

$$F_x^P \text{ at age 43 (NPA 67)} = 10.21$$

$$F_x^P \text{ at age 43 (NPA 68)} = 9.67$$

$$F_x^P \text{ at age 43 (NPA 67 years 5 months)} = 10.21 + \{5/12 \times [9.67 - 10.21]\} = 9.99$$

$$F_x^S \text{ at age 43 (NPA 67)} = 1.24$$

$$F_x^S \text{ at age 43 (NPA 68)} = 1.24$$

$$F_x^S \text{ at age 43 (NPA 67 years 5 months)} = 1.24 + \{5/12 \times [1.24 - 1.24]\} = 1.24$$

From point 3.2, the following formulae should be used to calculate the CETV:

$$\text{CETV} = P \times F_x^P + S \times F_x^S - NI \times F_x^{NI}$$

$$F_x^P = 9.99$$

$$F_x^S = 1.24$$

CETV calculation

$$\text{CETV} = £2,500.00 \times 9.99 + £937.50 \times 1.24 = £26,137.50$$



Example 2 – member with a buy-out election

Member details

Gender	Female
Date of birth	6 August 1985
Relevant date	1 December 2020
NPA	6 August 2053 (68)
Age last birthday at relevant date	35
Deferred pension at the relevant date (all of which is subject to the member's buy-out election)	£2,000 pa
Deferred survivor's pension at the relevant date	£750 pa
Number of years for which the standard reduction has been bought out	2

From paragraph 4.3, the following formula should be used:

$$CETV = [P \times F_x^p \times AF_B + S \times F_x^s]$$

The factors should be selected with reference to the member's age, sex and buy-out retirement age. The member's buy-out retirement age is equal to the member's expected normal pension age, less the number of years for which the standard reduction has been bought out.

$$\text{Member's buy-out retirement age} = 68 - 2 = 66$$

$$AF_B - \text{Table AF1, 2 years} = 0.955$$

$$F_x^p - \text{Table 153 (NPA 66), age 35} = 9.08$$

$$F_x^s - \text{Table 153 (NPA 66), age 35} = 1.06$$

CETV calculation

$$CETV = £2,000.00 \times 9.08 \times 0.955 + £750.00 \times 1.06 = £18,137.80$$



6 Calculating CETVs – Additional pension

- 6.1 To calculate the CETV for a member's deferred AP the following formula should be used:

$$CETV = [P \times F_x^P + S \times F_x^S]$$

where:

- P = member's additional pension at the relevant date
 S = dependant's additional pension at the relevant date
 F_x^P = relevant pension factor for a member aged x
 F_x^S = relevant survivor's pension factor for a member aged x

- 6.2 Different factors should be used based on when an AP election was made. Elections made on or before 22 June 2010 are subject to revaluation in line with the Retail Prices Index (RPI) before coming into payment; the relevant factors for these elections are set out in paragraph 6.3. Elections made after 22 June 2010 are subject to revaluation in line with the Consumer Prices Index (CPI) before coming into payment; the relevant factors for these elections are set out in paragraph 6.4.
- 6.3 The relevant factors for members with AP in respect of an election made on or before 22 June 2010, set out in Appendix A, are as follows:
- **Table CEM60R:** CETV factors for men, NPA 60, AP in respect of an election made on or before 22 June 2010
 - **Table CEF60R:** CETV factors for women, NPA 60, AP in respect of an election made on or before 22 June 2010
 - **Table CEM65R:** CETV factors for men, NPA 65, AP in respect of an election made on or before 22 June 2010
 - **Table CEF65R:** CETV factors for women, NPA 65, AP in respect of an election made on or before 22 June 2010



- 6.4 The relevant factors for members with AP in respect of an election made after 22 June 2010, set out in Appendix A, are as follows:
- **Table 103:** CETV factors for men, NPA 60
 - **Table 113:** CETV factors for women, NPA 60
 - **Table 123:** CETV factors for men, NPA 65
 - **Table 133:** CETV factors for women, NPA 65
 - **Table 143:** CETV factors for men, NPA 66
 - **Table 153:** CETV factors for women, NPA 66
 - **Table 163:** CETV factors for men, NPA 67
 - **Table 173:** CETV factors for women, NPA 67
 - **Table 183:** CETV factors for men, NPA 68
 - **Table 193:** CETV factors for women, NPA 68
- 6.5 The factors shown in paragraphs 6.3 and 6.4 should be selected with reference to the member's age, sex and normal pension age.
- 6.6 Separate CETVs should be calculated for Additional Pension elections with a different normal pension age. Separate CETVs should also be calculated for elections made on or before 22 June 2010 and for elections made after 22 June 2010.



Appendix A: Factors

List of Tables

- Table 103: CETV factors for men, normal pension age of 60 (Table 202 in consolidated factor spreadsheet)
- Table 113: CETV factors for women, normal pension age of 60 (Table 203 in consolidated factor spreadsheet)
- Table 123: CETV factors for men, normal pension age of 65 (Table 204 in consolidated factor spreadsheet)
- Table 133: CETV factors for women, normal pension age of 65 (Tables 205 and 206 in consolidated factor spreadsheet)
- Table 143: CETV factors for men, normal pension age of 66 (Tables 207 and 208 in consolidated factor spreadsheet)
- Table 153: CETV factors for women, normal pension age of 66 (Tables 209 and 210 in consolidated factor spreadsheet)
- Table 163: CETV factors for men, normal pension age of 67 (Tables 211 and 212 in consolidated factor spreadsheet)
- Table 173: CETV factors for women, normal pension age of 67 (Tables 213 and 214 in consolidated factor spreadsheet)
- Table 183: CETV factors for men, normal pension age of 68 (Tables 215 and 216 in consolidated factor spreadsheet)
- Table 193: CETV factors for women, normal pension age of 68 (Tables 217 and 218 in consolidated factor spreadsheet)
- Table CEM60R: CETV factors for men, NPA 60, AP in respect of an election made on or before 22 June 2010 (Table 219 in consolidated factor spreadsheet)
- Table CEF60R: CETV factors for women, NPA 60, AP in respect of an election made on or before 22 June 2010 (Table 220 in consolidated factor spreadsheet)
- Table CEM65R: CETV factors for men, NPA 65, AP in respect of an election made on or before 22 June 2010 (Table 221 in consolidated factor spreadsheet)
- Table CEF65R: CETV factors for women, NPA 65, AP in respect of an election made on or before 22 June 2010 (Table 222 in consolidated factor spreadsheet)
- Table AF1: Adjustment factor for cash equivalent transfer values where a buy-out election applies (Table 226 in consolidated factor spreadsheet)



Table 103: CETV factors for men, normal pension age of 60 (Table 202 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Lump Sum of £1	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	8.75	0.39	0.74	4.86
21	8.94	0.40	0.76	4.99
22	9.13	0.41	0.78	5.13
23	9.33	0.42	0.80	5.27
24	9.54	0.43	0.82	5.41
25	9.75	0.44	0.83	5.56
26	9.96	0.45	0.85	5.71
27	10.18	0.46	0.87	5.86
28	10.41	0.47	0.89	6.02
29	10.64	0.49	0.91	6.19
30	10.87	0.50	0.93	6.36
31	11.11	0.51	0.95	6.53
32	11.35	0.52	0.97	6.71
33	11.60	0.53	0.99	6.90
34	11.86	0.55	1.01	7.09
35	12.12	0.56	1.03	7.28
36	12.39	0.57	1.06	7.48
37	12.67	0.59	1.08	7.69
38	12.95	0.60	1.10	7.90
39	13.23	0.62	1.12	8.12
40	13.53	0.63	1.14	8.35
41	13.83	0.64	1.16	8.58
42	14.14	0.66	1.18	8.82
43	14.45	0.68	1.20	9.07
44	14.78	0.69	1.22	9.33
45	15.11	0.71	1.24	9.59
46	15.45	0.73	1.26	9.86
47	15.79	0.74	1.28	10.14
48	16.15	0.76	1.30	10.43
49	16.52	0.78	1.32	10.72
50	16.89	0.80	1.34	11.03
51	17.28	0.82	1.36	11.34
52	17.67	0.84	1.38	11.67
53	18.08	0.86	1.40	12.00
54	18.50	0.88	1.42	12.35
55	18.93	0.90	1.43	12.71
56	19.37	0.92	1.45	13.09
57	19.83	0.94	1.46	13.48
58	20.30	0.97	1.47	13.88
59	20.79	0.99	1.48	14.30



Table 113: CETV factors for women, normal pension age of 60 (Table 203 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Lump Sum of £1	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	8.75	0.39	0.74	5.23
21	8.94	0.40	0.76	5.37
22	9.13	0.41	0.78	5.52
23	9.33	0.42	0.80	5.67
24	9.54	0.43	0.82	5.83
25	9.75	0.44	0.83	5.99
26	9.96	0.45	0.85	6.16
27	10.18	0.46	0.87	6.33
28	10.41	0.47	0.89	6.50
29	10.64	0.49	0.91	6.68
30	10.87	0.50	0.93	6.87
31	11.11	0.51	0.95	7.06
32	11.35	0.52	0.97	7.26
33	11.60	0.53	0.99	7.46
34	11.86	0.55	1.01	7.67
35	12.12	0.56	1.03	7.88
36	12.39	0.57	1.06	8.10
37	12.67	0.59	1.08	8.32
38	12.95	0.60	1.10	8.56
39	13.23	0.62	1.12	8.79
40	13.53	0.63	1.14	9.04
41	13.83	0.64	1.16	9.29
42	14.14	0.66	1.18	9.55
43	14.45	0.68	1.20	9.82
44	14.78	0.69	1.22	10.09
45	15.11	0.71	1.24	10.38
46	15.45	0.73	1.26	10.67
47	15.79	0.74	1.28	10.97
48	16.15	0.76	1.30	11.27
49	16.52	0.78	1.32	11.59
50	16.89	0.80	1.34	11.92
51	17.28	0.82	1.36	12.26
52	17.67	0.84	1.38	12.60
53	18.08	0.86	1.40	12.96
54	18.50	0.88	1.42	13.34
55	18.93	0.90	1.43	13.72
56	19.37	0.92	1.45	14.12
57	19.83	0.94	1.46	14.53
58	20.30	0.97	1.47	14.95
59	20.79	0.99	1.48	15.39



Table 123: CETV factors for men, normal pension age of 65 (Table 204 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.94	0.75	4.86
21	7.09	0.77	4.99
22	7.24	0.79	5.13
23	7.40	0.81	5.27
24	7.56	0.83	5.41
25	7.72	0.85	5.56
26	7.89	0.87	5.71
27	8.06	0.89	5.86
28	8.23	0.91	6.02
29	8.41	0.93	6.19
30	8.59	0.95	6.36
31	8.77	0.97	6.53
32	8.96	0.99	6.71
33	9.15	1.01	6.90
34	9.35	1.03	7.09
35	9.55	1.05	7.28
36	9.76	1.07	7.48
37	9.97	1.10	7.69
38	10.19	1.12	7.90
39	10.41	1.14	8.12
40	10.64	1.16	8.35
41	10.87	1.18	8.58
42	11.10	1.20	8.82
43	11.35	1.22	9.07
44	11.59	1.24	9.33
45	11.85	1.27	9.59
46	12.11	1.29	9.86
47	12.37	1.31	10.14
48	12.64	1.33	10.43
49	12.92	1.35	10.72
50	13.21	1.37	11.03
51	13.50	1.39	11.34
52	13.80	1.41	11.67
53	14.11	1.43	12.00
54	14.43	1.45	12.35
55	14.76	1.47	12.71
56	15.10	1.48	13.09
57	15.45	1.50	13.48
58	15.80	1.51	13.88
59	16.18	1.52	14.30
60	16.56	1.53	14.74
61	16.95	1.54	15.19
62	17.36	1.55	15.66
63	17.79	1.55	16.16
64	18.23	1.55	16.67



Table 133: CETV factors for women normal pension age of 65

**Table 133a: CETV factors for women, normal pension age of 65, ages 20 to 59
(Table 205 in consolidated factor spreadsheet)**

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.94	0.75	5.23
21	7.09	0.77	5.37
22	7.24	0.79	5.52
23	7.40	0.81	5.67
24	7.56	0.83	5.83
25	7.72	0.85	5.99
26	7.89	0.87	6.16
27	8.06	0.89	6.33
28	8.23	0.91	6.50
29	8.41	0.93	6.68
30	8.59	0.95	6.87
31	8.77	0.97	7.06
32	8.96	0.99	7.26
33	9.15	1.01	7.46
34	9.35	1.03	7.67
35	9.55	1.05	7.88
36	9.76	1.07	8.10
37	9.97	1.10	8.32
38	10.19	1.12	8.56
39	10.41	1.14	8.79
40	10.64	1.16	9.04
41	10.87	1.18	9.29
42	11.10	1.20	9.55
43	11.35	1.22	9.82
44	11.59	1.24	10.09
45	11.85	1.27	10.38
46	12.11	1.29	10.67
47	12.37	1.31	10.97
48	12.64	1.33	11.27
49	12.92	1.35	11.59
50	13.21	1.37	11.92
51	13.50	1.39	12.26
52	13.80	1.41	12.60
53	14.11	1.43	12.96
54	14.43	1.45	13.34
55	14.76	1.47	13.72
56	15.10	1.48	14.12
57	15.45	1.50	14.53
58	15.80	1.51	14.95
59	16.18	1.52	15.39



Table 133: CETV factors for women normal pension age of 65

**Table 133b: CETV factors for women, normal pension age of 65, ages 60 to 64
(Table 206 in consolidated factor spreadsheet)**

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
60	16.56	1.53	15.85
61	16.95	1.54	16.33
62	17.36	1.55	16.82
63	17.79	1.55	17.34
64	18.23	1.55	17.87



Table 143: CETV factors for men normal pension age of 66

Table 143a: CETV factors for men, normal pension age of 66, ages 20 to 64 (Table 207 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.61	0.76	4.86
21	6.75	0.78	4.99
22	6.89	0.79	5.13
23	7.04	0.81	5.27
24	7.19	0.83	5.41
25	7.35	0.85	5.56
26	7.50	0.87	5.71
27	7.66	0.89	5.86
28	7.83	0.91	6.02
29	8.00	0.93	6.19
30	8.17	0.95	6.36
31	8.34	0.97	6.53
32	8.52	0.99	6.71
33	8.70	1.01	6.90
34	8.89	1.04	7.09
35	9.08	1.06	7.28
36	9.27	1.08	7.48
37	9.47	1.10	7.69
38	9.68	1.12	7.90
39	9.89	1.14	8.12
40	10.10	1.17	8.35
41	10.32	1.19	8.58
42	10.54	1.21	8.82
43	10.77	1.23	9.07
44	11.01	1.25	9.33
45	11.24	1.27	9.59
46	11.49	1.29	9.86
47	11.74	1.32	10.14
48	12.00	1.34	10.43
49	12.26	1.36	10.72
50	12.53	1.38	11.03
51	12.81	1.40	11.34
52	13.09	1.42	11.67
53	13.38	1.44	12.00
54	13.68	1.46	12.35
55	13.99	1.47	12.71
56	14.31	1.49	13.09
57	14.64	1.50	13.48
58	14.98	1.52	13.88
59	15.33	1.53	14.30
60	15.69	1.54	14.74
61	16.06	1.55	15.19
62	16.44	1.55	15.66
63	16.85	1.56	16.16
64	17.26	1.56	16.67



Table 143: CETV factors for men normal pension age of 66

Table 143b: CETV factors for men, normal pension age of 66, age 65 (Table 208 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
65	17.70	1.56	16.70



Table 153: CETV factors for women normal pension age of 66

**Table 153a: CETV factors for women, normal pension age of 66, ages 20 to 59
(Table 209 in consolidated factor spreadsheet)**

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.61	0.76	5.23
21	6.75	0.78	5.37
22	6.89	0.79	5.52
23	7.04	0.81	5.67
24	7.19	0.83	5.83
25	7.35	0.85	5.99
26	7.50	0.87	6.16
27	7.66	0.89	6.33
28	7.83	0.91	6.50
29	8.00	0.93	6.68
30	8.17	0.95	6.87
31	8.34	0.97	7.06
32	8.52	0.99	7.26
33	8.70	1.01	7.46
34	8.89	1.04	7.67
35	9.08	1.06	7.88
36	9.27	1.08	8.10
37	9.47	1.10	8.32
38	9.68	1.12	8.56
39	9.89	1.14	8.79
40	10.10	1.17	9.04
41	10.32	1.19	9.29
42	10.54	1.21	9.55
43	10.77	1.23	9.82
44	11.01	1.25	10.09
45	11.24	1.27	10.38
46	11.49	1.29	10.67
47	11.74	1.32	10.97
48	12.00	1.34	11.27
49	12.26	1.36	11.59
50	12.53	1.38	11.92
51	12.81	1.40	12.26
52	13.09	1.42	12.60
53	13.38	1.44	12.96
54	13.68	1.46	13.34
55	13.99	1.47	13.72
56	14.31	1.49	14.12
57	14.64	1.50	14.53
58	14.98	1.52	14.95
59	15.33	1.53	15.39



Table 153: CETV factors for women normal pension age of 66

Table 153b: CETV factors for women, normal pension age of 66, ages 60 to 65
(Table 210 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
60	15.69	1.54	15.85
61	16.06	1.55	16.33
62	16.44	1.55	16.82
63	16.85	1.56	17.34
64	17.26	1.56	17.87
65	17.70	1.56	17.92



Table 163: CETV factors for men normal pension age of 67

Table 163a: CETV factors for men, normal pension age of 67, ages 20 to 64 (Table 211 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.28	0.76	4.86
21	6.42	0.78	4.99
22	6.55	0.80	5.13
23	6.69	0.82	5.27
24	6.84	0.84	5.41
25	6.98	0.85	5.56
26	7.13	0.87	5.71
27	7.28	0.89	5.86
28	7.44	0.91	6.02
29	7.59	0.94	6.19
30	7.76	0.96	6.36
31	7.92	0.98	6.53
32	8.09	1.00	6.71
33	8.26	1.02	6.90
34	8.44	1.04	7.09
35	8.62	1.06	7.28
36	8.80	1.08	7.48
37	8.99	1.11	7.69
38	9.18	1.13	7.90
39	9.38	1.15	8.12
40	9.58	1.17	8.35
41	9.79	1.19	8.58
42	10.00	1.21	8.82
43	10.21	1.24	9.07
44	10.43	1.26	9.33
45	10.66	1.28	9.59
46	10.89	1.30	9.86
47	11.13	1.32	10.14
48	11.37	1.35	10.43
49	11.62	1.37	10.72
50	11.87	1.39	11.03
51	12.13	1.41	11.34
52	12.40	1.43	11.67
53	12.67	1.45	12.00
54	12.96	1.47	12.35
55	13.25	1.48	12.71
56	13.55	1.50	13.09
57	13.85	1.51	13.48
58	14.17	1.53	13.88
59	14.50	1.54	14.30
60	14.84	1.55	14.74
61	15.19	1.56	15.19
62	15.55	1.57	15.66
63	15.93	1.57	16.16
64	16.32	1.57	16.67



Table 163: CETV factors for men normal pension age of 67

Table 163b: CETV factors for men, normal pension age of 67, ages 65 to 66 (Table 212 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
65	16.73	1.57	16.70
66	17.15	1.57	16.23



Table 173: CETV factors for women normal pension age of 67

Table 173a: CETV factors for women, normal pension age of 67, ages 20 to 59 (Table 213 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	6.28	0.76	5.23
21	6.42	0.78	5.37
22	6.55	0.80	5.52
23	6.69	0.82	5.67
24	6.84	0.84	5.83
25	6.98	0.85	5.99
26	7.13	0.87	6.16
27	7.28	0.89	6.33
28	7.44	0.91	6.50
29	7.59	0.94	6.68
30	7.76	0.96	6.87
31	7.92	0.98	7.06
32	8.09	1.00	7.26
33	8.26	1.02	7.46
34	8.44	1.04	7.67
35	8.62	1.06	7.88
36	8.80	1.08	8.10
37	8.99	1.11	8.32
38	9.18	1.13	8.56
39	9.38	1.15	8.79
40	9.58	1.17	9.04
41	9.79	1.19	9.29
42	10.00	1.21	9.55
43	10.21	1.24	9.82
44	10.43	1.26	10.09
45	10.66	1.28	10.38
46	10.89	1.30	10.67
47	11.13	1.32	10.97
48	11.37	1.35	11.27
49	11.62	1.37	11.59
50	11.87	1.39	11.92
51	12.13	1.41	12.26
52	12.40	1.43	12.60
53	12.67	1.45	12.96
54	12.96	1.47	13.34
55	13.25	1.48	13.72
56	13.55	1.50	14.12
57	13.85	1.51	14.53
58	14.17	1.53	14.95
59	14.50	1.54	15.39



Table 173: CETV factors for women normal pension age of 67

**Table 173b: CETV factors for women, normal pension age of 67, ages 60 to 66
(Table 214 in consolidated factor spreadsheet)**

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
60	14.84	1.55	15.85
61	15.19	1.56	16.33
62	15.55	1.57	16.82
63	15.93	1.57	17.34
64	16.32	1.57	17.87
65	16.73	1.57	17.92
66	17.15	1.57	17.47



Table 183: CETV factors for men normal pension age of 68

Table 183a: CETV factors for men, normal pension age of 68, ages 20 to 64 (Table 215 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	5.97	0.76	4.86
21	6.09	0.78	4.99
22	6.22	0.80	5.13
23	6.35	0.82	5.27
24	6.49	0.84	5.41
25	6.63	0.86	5.56
26	6.77	0.88	5.71
27	6.91	0.90	5.86
28	7.05	0.92	6.02
29	7.20	0.94	6.19
30	7.36	0.96	6.36
31	7.51	0.98	6.53
32	7.67	1.00	6.71
33	7.83	1.03	6.90
34	8.00	1.05	7.09
35	8.17	1.07	7.28
36	8.34	1.09	7.48
37	8.52	1.11	7.69
38	8.70	1.13	7.90
39	8.89	1.16	8.12
40	9.08	1.18	8.35
41	9.27	1.20	8.58
42	9.47	1.22	8.82
43	9.67	1.24	9.07
44	9.88	1.27	9.33
45	10.09	1.29	9.59
46	10.31	1.31	9.86
47	10.53	1.33	10.14
48	10.76	1.35	10.43
49	10.99	1.38	10.72
50	11.23	1.40	11.03
51	11.47	1.42	11.34
52	11.72	1.44	11.67
53	11.98	1.46	12.00
54	12.25	1.48	12.35
55	12.52	1.49	12.71
56	12.80	1.51	13.09
57	13.09	1.52	13.48
58	13.39	1.54	13.88
59	13.70	1.55	14.30
60	14.02	1.56	14.74
61	14.34	1.57	15.19
62	14.68	1.58	15.66
63	15.04	1.58	16.16
64	15.40	1.59	16.67



Table 183: CETV factors for men normal pension age of 68

Table 183b: CETV factors for men, normal pension age of 68, ages 65 to 67 (Table 216 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
65	15.79	1.59	16.70
66	16.19	1.58	16.23
67	16.60	1.58	15.75



Table 193: CETV factors for women normal pension age of 68

Table 193a: CETV factors for women, normal pension age of 68, ages 20 to 59 (Table 217 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
20	5.97	0.76	5.23
21	6.09	0.78	5.37
22	6.22	0.80	5.52
23	6.35	0.82	5.67
24	6.49	0.84	5.83
25	6.63	0.86	5.99
26	6.77	0.88	6.16
27	6.91	0.90	6.33
28	7.05	0.92	6.50
29	7.20	0.94	6.68
30	7.36	0.96	6.87
31	7.51	0.98	7.06
32	7.67	1.00	7.26
33	7.83	1.03	7.46
34	8.00	1.05	7.67
35	8.17	1.07	7.88
36	8.34	1.09	8.10
37	8.52	1.11	8.32
38	8.70	1.13	8.56
39	8.89	1.16	8.79
40	9.08	1.18	9.04
41	9.27	1.20	9.29
42	9.47	1.22	9.55
43	9.67	1.24	9.82
44	9.88	1.27	10.09
45	10.09	1.29	10.38
46	10.31	1.31	10.67
47	10.53	1.33	10.97
48	10.76	1.35	11.27
49	10.99	1.38	11.59
50	11.23	1.40	11.92
51	11.47	1.42	12.26
52	11.72	1.44	12.60
53	11.98	1.46	12.96
54	12.25	1.48	13.34
55	12.52	1.49	13.72
56	12.80	1.51	14.12
57	13.09	1.52	14.53
58	13.39	1.54	14.95
59	13.70	1.55	15.39



Table 193: CETV factors for women normal pension age of 68

**Table 193b: CETV factors for women, normal pension age of 68, ages 60 to 67
(Table 218 in consolidated factor spreadsheet)**

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa	Deduction for NI Modification of £1 pa
60	14.02	1.56	15.85
61	14.34	1.57	16.33
62	14.68	1.58	16.82
63	15.04	1.58	17.34
64	15.40	1.59	17.87
65	15.79	1.59	17.92
66	16.19	1.58	17.47
67	16.60	1.58	17.01



Table CEM60R: CETV factors for men, NPA 60, AP in respect of an election made on or before 22 June 2010 (Table 219 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa
20	13.61	1.16
21	13.75	1.17
22	13.90	1.19
23	14.05	1.20
24	14.19	1.21
25	14.34	1.23
26	14.50	1.24
27	14.65	1.26
28	14.81	1.27
29	14.96	1.28
30	15.12	1.30
31	15.28	1.31
32	15.45	1.32
33	15.61	1.34
34	15.78	1.35
35	15.95	1.36
36	16.12	1.37
37	16.29	1.38
38	16.47	1.40
39	16.65	1.41
40	16.83	1.42
41	17.01	1.43
42	17.20	1.43
43	17.39	1.44
44	17.58	1.45
45	17.77	1.46
46	17.97	1.47
47	18.17	1.48
48	18.37	1.48
49	18.58	1.49
50	18.79	1.49
51	19.00	1.50
52	19.22	1.50
53	19.44	1.51
54	19.67	1.51
55	19.90	1.51
56	20.14	1.51
57	20.39	1.50
58	20.64	1.50
59	20.90	1.49



Table CEF60R: CETV factors for women, NPA 60, AP in respect of an election made on or before 22 June 2010 (Table 220 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa
20	13.61	1.16
21	13.75	1.17
22	13.90	1.19
23	14.05	1.20
24	14.19	1.21
25	14.34	1.23
26	14.50	1.24
27	14.65	1.26
28	14.81	1.27
29	14.96	1.28
30	15.12	1.30
31	15.28	1.31
32	15.45	1.32
33	15.61	1.34
34	15.78	1.35
35	15.95	1.36
36	16.12	1.37
37	16.29	1.38
38	16.47	1.40
39	16.65	1.41
40	16.83	1.42
41	17.01	1.43
42	17.20	1.43
43	17.39	1.44
44	17.58	1.45
45	17.77	1.46
46	17.97	1.47
47	18.17	1.48
48	18.37	1.48
49	18.58	1.49
50	18.79	1.49
51	19.00	1.50
52	19.22	1.50
53	19.44	1.51
54	19.67	1.51
55	19.90	1.51
56	20.14	1.51
57	20.39	1.50
58	20.64	1.50
59	20.90	1.49



Table CEM65R: CETV factors for men, NPA 65, AP in respect of an election made on or before 22 June 2010 (Table 221 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa
20	11.43	1.24
21	11.54	1.26
22	11.66	1.27
23	11.78	1.29
24	11.89	1.30
25	12.01	1.32
26	12.14	1.33
27	12.26	1.35
28	12.38	1.36
29	12.51	1.38
30	12.64	1.39
31	12.76	1.41
32	12.89	1.42
33	13.03	1.44
34	13.16	1.45
35	13.29	1.47
36	13.43	1.48
37	13.57	1.49
38	13.71	1.50
39	13.85	1.51
40	13.99	1.53
41	14.14	1.54
42	14.28	1.55
43	14.43	1.56
44	14.58	1.57
45	14.74	1.58
46	14.89	1.58
47	15.05	1.59
48	15.21	1.60
49	15.37	1.61
50	15.54	1.61
51	15.71	1.62
52	15.88	1.62
53	16.05	1.63
54	16.23	1.63
55	16.42	1.63
56	16.60	1.63
57	16.80	1.63
58	17.00	1.62
59	17.20	1.62
60	17.41	1.61
61	17.63	1.60
62	17.86	1.59
63	18.09	1.58
64	18.33	1.56



Table CEF65R: CETV factors for women, NPA 65, AP in respect of an election made on or before 22 June 2010 (Table 222 in consolidated factor spreadsheet)

Age last birthday at relevant date	Gross Pension of £1 per annum	Surviving Partner's Pension of £1 pa
20	11.43	1.24
21	11.54	1.26
22	11.66	1.27
23	11.78	1.29
24	11.89	1.30
25	12.01	1.32
26	12.14	1.33
27	12.26	1.35
28	12.38	1.36
29	12.51	1.38
30	12.64	1.39
31	12.76	1.41
32	12.89	1.42
33	13.03	1.44
34	13.16	1.45
35	13.29	1.47
36	13.43	1.48
37	13.57	1.49
38	13.71	1.50
39	13.85	1.51
40	13.99	1.53
41	14.14	1.54
42	14.28	1.55
43	14.43	1.56
44	14.58	1.57
45	14.74	1.58
46	14.89	1.58
47	15.05	1.59
48	15.21	1.60
49	15.37	1.61
50	15.54	1.61
51	15.71	1.62
52	15.88	1.62
53	16.05	1.63
54	16.23	1.63
55	16.42	1.63
56	16.60	1.63
57	16.80	1.63
58	17.00	1.62
59	17.20	1.62
60	17.41	1.61
61	17.63	1.60
62	17.86	1.59
63	18.09	1.58
64	18.33	1.56



Table AF1 (Table 226 in consolidated factor spreadsheet)

Teachers' Pension Scheme: Actuarial Factors

Adjustment factor for cash equivalent transfer values where a buy-out election applies

Bought-out Years	Months											
	0	1	2	3	4	5	6	7	8	9	10	11
0	1.000	0.998	0.996	0.994	0.992	0.990	0.988	0.986	0.983	0.981	0.979	0.977
1	0.975	0.974	0.972	0.970	0.968	0.967	0.965	0.963	0.962	0.960	0.958	0.957
2	0.955	0.954	0.952	0.951	0.950	0.948	0.947	0.946	0.944	0.943	0.942	0.940
3	0.939											

Note: Factors should be selected with reference to the number of years and months for which the member has bought out the standard reduction.



Appendix B: Assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448% pa
Real discount rate (in excess of CPI)	2.40% pa

Mortality assumptions

Base mortality tables and adjustments	Males: 106% of S2NMA_L and Females: 75% of S1NFA_L up to age 79, 86% at ages 80 to 84, 100% at ages 85 to 89, 108% from age 90
Future mortality improvement	Based on ONS principal UK population projections 2016
Year of Use	2020

Other assumptions

Proportion of male members for the purpose of unisexing factors	30%
Allowance for commutation	Nil



Appendix C: Limitations

- C.1 This guidance should not be used for any purpose other than those set out in this guidance.
- C.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.
- C.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.
- C.4 This guidance only covers the actuarial principles around the calculation and application of cash equivalent transfer value factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- C.5 Scheme managers and administrators should satisfy themselves that cash equivalent transfer value calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- C.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 DENI and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.