

# Scottish Teachers' Pension Schemes Summary of the 2020 assumptions used in the actuarial valuation as at 31 March 2020

This report is supplemental to the Advice on assumptions report dated 20 October 2023 and should be read in conjunction with that report. This report contains further details of the 'scheme-set' assumptions to be adopted for the actuarial valuation of the Scottish Teachers' Pension Schemes as at 31 March 2020, including sample rates and values. The assumptions adopted at the previous valuation as at 31 March 2016 are set out in our Advice on assumptions report for that valuation, located here: <a href="https://www.gov.uk/government/publications/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports.">https://www.gov.uk/government/publications/public-service-pensions-2016-actuarial-valuation-reports.</a>

#### **Mortality after retirement**

Baseline mortality	Standard table	Adjustment
Males		
Retirements in normal health	S3NMA	105%
Current ill-health pensioners	S3IMA	97%
Future ill-health pensioners	S3IMA	97%
Dependants	S3DMA	98%
emales		
Retirements in normal health	S3NFA	105%
Current ill-health pensioners	S3IFA	115%
Future ill-health pensioners	S3IFA	115%
Dependants	S3DFA	101%

## Commutation of pension for cash at retirement

	NPA 60 section	NPA 65 section	2015 scheme
Males and females	10%	20%	20%



Retirement ages

Age retirement rates with service only in NPA 60 section or NPA 65 section

•	NP	'A 60	NPA 65		
Age	Males	Females	Males	Females	
55	0.08	0.05	-	-	
56	0.08	0.06	-	-	
57	0.11	0.09	-	-	
58	0.14	0.12	-	-	
59	0.16	0.14	-	-	
60	0.42	0.48	0.08	0.05	
61	0.40	0.49	0.08	0.06	
62	0.34	0.39	0.11	0.09	
63	0.32	0.31	0.14	0.12	
64	0.39	0.35	0.16	0.14	
65	0.70	0.56	1.00	1.00	
66	0.60	0.57	1.00	1.00	
67	0.67	0.62	1.00	1.00	
68	0.67	0.62	1.00	1.00	
69	0.67	0.62	1.00	1.00	
70	1.00	1.00	1.00	1.00	

### Age retirement rates for new entrants into the 2015 scheme

Ago	Age SPA 65		SP	A 66	SP	A 67	SP	A 68
Age	Males	Females	Males	Females	Males	Females	Males	Females
55	-	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-	-
57	-	-	-	-	-	-	-	-
58	-	-	-	-	-	-	-	-
59	-	-	-	-	-	-	-	-
60	0.08	0.05	0.08	0.05	0.08	0.05	80.0	0.05
61	80.0	0.06	0.08	0.06	0.08	0.06	0.08	0.06
62	0.11	0.09	0.11	0.09	0.11	0.09	0.11	0.09
63	0.14	0.12	0.14	0.12	0.14	0.12	0.14	0.12
64	0.16	0.14	0.16	0.14	0.16	0.14	0.16	0.14
65	1.00	1.00	0.50	0.50	0.33	0.33	0.25	0.25
66	1.00	1.00	1.00	1.00	0.50	0.50	0.33	0.33
67	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
68	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

#### Age retirement rates for members with service in NPA 60 section and 2015 scheme

Age	SP	A 67	SP	A 68
	Males	Females	Males	Females
55	0.06	0.04	0.02	0.01
56	0.06	0.05	0.02	0.02
57	0.08	0.07	0.03	0.02
58	0.11	0.10	0.03	0.03
59	0.12	0.11	0.04	0.04
60	0.34	0.39	0.16	0.16
61	0.33	0.40	0.16	0.17
62	0.29	0.32	0.16	0.16
63	0.28	0.27	0.18	0.17
64	0.34	0.30	0.22	0.19
65	0.60	0.49	0.36	0.33
66	0.54	0.52	0.40	0.39
67	0.63	0.59	0.54	0.53
68	0.74	0.70	0.92	0.90
69	0.74	0.70	0.92	0.90
70	1.00	1.00	1.00	1.00

#### Age retirement rates for members with service in NPA 65 section and 2015 scheme

SPA 65		A 65	SP	A 66	SP	A 67	SP	A 68
Age	Males	Females	Males	Females	Males	Females	Males	Females
55	-	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-	-
57	-	-	-	-	-	-	-	-
58	-	-	-	-	-	-	-	-
59	-	-	-	-	-	-	-	-
60	0.08	0.05	0.08	0.05	0.08	0.05	0.08	0.05
61	0.08	0.06	0.08	0.06	0.08	0.06	0.08	0.06
62	0.11	0.09	0.11	0.09	0.11	0.09	0.11	0.09
63	0.14	0.12	0.14	0.12	0.14	0.12	0.14	0.12
64	0.16	0.14	0.16	0.14	0.16	0.14	0.16	0.14
65	1.00	1.00	1.00	1.00	0.76	0.76	0.41	0.41
66	1.00	1.00	1.00	1.00	0.78	0.78	0.48	0.48
67	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.61
68	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Although there has been no change to the assumptions, rates in the age retirement tables above differ from the equivalent tables in the 2012 report because they have been presented using a different age definition.

# Rates of leaving service (net of re-entry within 5 years) for all members

Age	Males	Females
20	0.096	0.061
25	0.077	0.055
30	0.028	0.023
35	0.016	0.010
40	0.013	0.009
45	0.013	0.009
50	0.014	0.010
55	0.014	0.012
60	0.014	0.012
65*	0.014	0.013

<sup>\*</sup>Rates are zero if above the NPA/SPA of the relevant section.

### Promotional pay increases for all members

Age	Males	Females
20	89	89
25	100	100
30	125	124
35	151	143
40	168	152
45	179	158
50	186	164
55	190	168
60	192	170
65	194	172

#### Rates of ill-health retirement for all members

Males	Females
-	-
0.0000	0.0000
0.0000	0.0001
0.0001	0.0002
0.0003	0.0003
0.0008	0.0008
0.0022	0.0020
0.0039	0.0039
0.0056	0.0059
0.0069	0.0079
	0.0000 0.0000 0.0001 0.0003 0.0008 0.0022 0.0039 0.0056

<sup>\*</sup>Rates are zero if above the NPA of the relevant section

In all scheme sections, 55% of ill-health retirements are assumed to qualify for upper tier awards.

# Mortality before retirement for all members

Age	Males	Females
20	0.0001	0.0000
25	0.0001	0.0001
30	0.0002	0.0001
35	0.0003	0.0002
40	0.0004	0.0003
45	0.0006	0.0004
50	0.0008	0.0006
55	0.0014	0.0009
60	0.0023	0.0012
65	0.0036	0.0017

## **Family statistics**

# Proportion married or married/partnered at retirement for future pensioners

	Accrual before 1/1/2007	Accrual on or after 1/1/2007
	Proportion married	Proportion married or partnered
Males	77%	77%
Females	58%	58%

# Proportion married or married/partnered at retirement for current pensioners (at the valuation date)

Λ σ ο	Accrual be	Accrual before 1/1/2007		r after 1/1/2007
Age	Males	Females	Males	Females
50	74%	58%	78%	60%
60	74%	58%	78%	60%
70	74%	46%	76%	47%
80	61%	23%	62%	23%
90	35%	7%	35%	7%

Dependants are assumed to be of the opposite gender as the member.

Men are assumed to be three years older than their partners and women are assumed to be two years younger than their partners.

No allowance is made for pensions to cease on remarriage.

#### 20 October 2023