

Police Pension Schemes (Scotland) 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 30 October 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 Police Pension Schemes (Scotland) 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 at the following https://www.gov.uk/government/publications/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-2016-actuarial-valuation-reports/public-service-pensions-pe

Mortality after retirement

Baseline mortality	Standard table	Adjustment
Males		
Retirements in normal health	S3NMA	120%
Current ill-health pensioners	S3NMA_H	118%
Future ill-health pensioners	S3NMA_H	118%
Dependants	S3DMA	88%
Females		
Retirements in normal health	S3NFA	129%
Current ill-health pensioners	S3NFA_H	136%
Future ill-health pensioners	S3NFA_H	136%
Dependants	S3DFA	111%



Commutation of pension for cash at retirement

Members are assumed to commute the following proportions of their pensions for cash.

Member with service in the following schemes	1987 Scheme only	2006 Scheme only	Mixed 1987 and 2015 scheme		A			2015 scheme only
Scheme pension commuted from	1987	2006	1987	2015	2006	2015	2015	
All members	25%*	0%	25%*	12%	0%	20%	20%	

^{* (}or, if lower, the maximum proportion of commutation allowable)

Retirement ages

Age retirement rates for 1987 Scheme members

Entry Age Age 20 25 30+ 48 - - - 49 - - - 50 0.800 0.030 - 51 0.550 0.015 - 52 0.400 0.015 - 53 0.400 0.015 - 54 0.400 0.015 - 55 0.400 0.900 0.200 56 0.400 0.550 0.200 57 0.400 0.400 0.400 0.200 58 0.400 0.400 0.400 0.200 59 0.400 0.400 0.400 0.200 60 1.000 1.000 1.000 1.000				
20 25 30+ 48 - - 49 - - 50 0.800 0.030 - 51 0.550 0.015 - 52 0.400 0.015 - 53 0.400 0.015 - 54 0.400 0.015 - 55 0.400 0.900 0.200 56 0.400 0.550 0.200 57 0.400 0.400 0.400 0.200 58 0.400 0.400 0.400 0.200 59 0.400 0.400 0.400 0.200			Entry Age	
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54 0.400 0.015 - 55 0.400 0.900 0.200 56 0.400 0.550 0.200 57 0.400 0.400 0.200 58 0.400 0.400 0.200 59 0.400 0.400 0.200	52	0.400	0.015	-
55 0.400 0.900 0.200 56 0.400 0.550 0.200 57 0.400 0.400 0.200 58 0.400 0.400 0.200 59 0.400 0.400 0.200	53	0.400	0.015	-
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59 0.400 0.400 0.200	57	0.400	0.400	0.200
	58	0.400	0.400	0.200
60 1.000 1.000 1.000	59	0.400	0.400	0.200
	60	1.000	1.000	1.000

Age retirement rates for 2006 Scheme members

Retirement Age	All Entry Ages
55	0.292
56	0.033
57	0.033
58	0.033
59	0.033
60	1.000

Age retirement rates for new entrants to the 2015 scheme

Retirement Age	All Entry Ages
55	0.250
56	-
57	-
58	-
59	-
60	1.000

Rates of leaving service

Males	Females
0.0628	0.0425
0.0408	0.0362
0.0287	0.0300
0.0231	0.0238
0.0120	0.0175
0.0099	0.0113
0.0077	0.0050
0.0000	0.0000
	0.0628 0.0408 0.0287 0.0231 0.0120 0.0099 0.0077

^{*}rates are zero if eligible to retire

Promotional pay increases

The salary scale shows assumed pay progression in excess of general wage inflation in comparison to an index base of 100 at entry.

Service	All members
0	100
5	121
10	141
15	152
20	158
25	171
30	185
35	185
40	185

Rates of ill-health retirement

Age	Males	Females
20	0.0000	0.0000
25	0.0000	0.0004
30	0.0001	0.0013
35	0.0009	0.0023
40	0.0016	0.0049
45	0.0051	0.0101
50	0.0093	0.0152
55*	0.0136	0.0203
59*	0.0169	0.0245

^{*}rates are zero if above the retirement age of the relevant scheme

75% of members retiring on ill-health grounds will receive the upper-tier benefits and the remaining 25% will receive the lower-tier benefits.

Mortality before retirement

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Age	Males	Females
20	0.0002	0.0001
25	0.0002	0.0001
30	0.0003	0.0002
35	0.0004	0.0003
40	0.0005	0.0005
45	0.0007	0.0007
50	0.0010	0.0012
55	0.0017	0.0018
60	0.0025	0.0028
65	0.0040	0.0043

Family statistics

Proportion married or partnered at retirement for future pensioners

	1987 Scheme	2006 Scheme and 2015 Scheme
	Proportion married	Proportion married or partnered
Males	80%	85%
Females	75%	80%

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

	1	1987 Scheme		nd 2015 Scheme
	Proportio	on married	•	on married rtnered
Age	Males	Females	Males	Females
50	80%	75%	85%	80%
60	80%	74%	85%	77%
70	75%	56%	78%	57%
80	63%	28%	64%	28%
90	36%	8%	36%	8%

Males are assumed to be three years older than their female partners.

30 October 2023