



Police Pension Schemes (England and Wales)

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 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 Police Pension Schemes (England and Wales) 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>].

Mortality after retirement

Baseline mortality	Standard table	Adjustment
Males		
Retirements in normal health	S3NMA	107%
Current ill-health pensioners	S3NMA_H	105%
Future ill-health pensioners	S3NMA_H	105%
Dependants	S3DMA	78%
Females		
Retirements in normal health	S3NFA	115%
Current ill-health pensioners	S3NFA_H	121%
Future ill-health pensioners	S3NFA_H	121%
Dependants	S3DFA	99%



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		Mixed 2006 and 2015 scheme		2015 scheme only
	1987	2006	1987	2015	2006	2015	2015
All members	0%	0%	0%	12%	0%	20%	20%

Retirement ages

Age retirement rates for 1987 Scheme members (protected and tapered)

Retirement Age	Entry 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	0.200
58	0.400	0.400	0.200
59	0.400	0.400	0.200
60	1.000	1.000	1.000

Age retirement rates for 1987 Scheme members (unprotected)

Retirement Age*	Entry Age		
	20	25	30+
55	0.970	0.900	0.225
56	0.400	0.550	0.100
57	0.400	0.400	0.100
58	0.400	0.400	0.100
59	0.400	0.400	0.100
60	1.000	1.000	1.000

*Allowance also included for 1987 Scheme unprotected members to access their 1987 Scheme lump sum at reaching 30 years of service if this come before age 55 under the 'Retire and Rejoin' option.

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

Age	Males	Females
20	0.0505	0.0505
25	0.033	0.033
30	0.025	0.0254
35	0.0233	0.0244
40	0.0204	0.0226
45	0.0133	0.0177
50*	0.01	0.0128
55*	0.0000	0.0000

*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	164
30	171
35	171
40	171

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

50% of members retiring on ill-health grounds will receive the upper-tier benefits and the remaining 50% will receive the lower-tier benefits.

Mortality before retirement

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)

	1987 Scheme		2006 Scheme and 2015 Scheme	
	Proportion married		Proportion married or partnered	
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