



The Armed Forces Pension Schemes

Summary of the 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 adopted for the actuarial valuation of the Armed Forces 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 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_H	85%
Current ill-health pensioners	S3NMA_H	85%
Future ill-health pensioners	S3NMA_H	85%
Dependants	S3NMA_H	85%
Females		
Retirements in normal health	S3NFA_H	95%
Current ill-health pensioners	S3NFA_H	95%
Future ill-health pensioners	S3NFA_H	95%
Dependants	S3PFA_H	88%

Commutation of pension for cash at retirement

Scheme	AFPS75		AFPS05		AFPS15
	Resettlement commutation	Life commutation	Inverse commutation of lump sum	Inverse commutation of Early Departure Payments (EDP) lump sum	Commutation of pension
All members	0%	0%	0%	0%	20%



Retirement ages

Age retirement rates for AFPS75 scheme members

Age at joining	AFPS75 Officers (Protected)			AFPS75 Officers (Unprotected)			AFPS75 Other Ranks (Protected)			AFPS75 Other Ranks (Unprotected)		
	20	25	30	20	25	30	20	25	30	20	25	30
Age												
37	0.14	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	0.07	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	0.06	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	0.05	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
41	0.05	0.14	0.00	0.05	0.14	0.00	0.00	0.00	0.00	0.01	0.00	0.00
42	0.05	0.07	0.00	0.05	0.05	0.00	0.35	0.00	0.00	0.25	0.00	0.00
43	0.05	0.06	0.00	0.05	0.05	0.00	0.20	0.00	0.00	0.20	0.00	0.00
44	0.05	0.05	0.00	0.05	0.04	0.00	0.20	0.00	0.00	0.20	0.00	0.00
45	0.05	0.05	0.00	0.05	0.10	0.00	0.20	0.00	0.00	0.20	0.13	0.00
46	0.05	0.05	0.14	0.05	0.05	0.14	0.15	0.00	0.00	0.15	0.01	0.00
47	0.10	0.05	0.07	0.10	0.05	0.05	0.15	0.35	0.00	0.15	0.25	0.00
48	0.10	0.05	0.06	0.10	0.05	0.05	0.15	0.20	0.00	0.15	0.20	0.00
49	0.10	0.05	0.05	0.10	0.05	0.04	0.15	0.20	0.00	0.15	0.20	0.00
50	0.10	0.05	0.05	0.10	0.05	0.10	0.15	0.20	0.00	0.20	0.20	0.13
51	0.10	0.10	0.05	0.15	0.10	0.05	0.15	0.15	0.00	0.15	0.15	0.01
52	0.15	0.15	0.10	0.15	0.15	0.10	0.15	0.15	0.35	0.15	0.15	0.25
53	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
54	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
55	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	0.80	0.80	0.80
56	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
57	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
58	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
59	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Age retirement rates for AFPS05 scheme members

Age at joining	AFPS05 Officers (Protected)			AFPS05 Officers (Unprotected)			AFPS05 Other Ranks (Protected)			AFPS05 Other Ranks (Unprotected)		
	20	25	30	20	25	30	20	25	30	20	25	30
Age												
40	0.23	0.00	0.00	0.24	0.00	0.00	0.30	0.00	0.00	0.30	0.00	0.00
41	0.05	0.00	0.00	0.05	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00
42	0.05	0.00	0.00	0.05	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00
43	0.05	0.23	0.00	0.05	0.06	0.00	0.20	0.30	0.00	0.20	0.01	0.00
44	0.05	0.05	0.00	0.05	0.01	0.00	0.20	0.20	0.00	0.20	0.01	0.00
45	0.05	0.05	0.00	0.10	0.24	0.00	0.15	0.20	0.00	0.15	0.30	0.00
46	0.05	0.05	0.00	0.10	0.05	0.00	0.15	0.20	0.00	0.15	0.20	0.00
47	0.10	0.05	0.00	0.10	0.05	0.00	0.15	0.20	0.00	0.15	0.20	0.00
48	0.10	0.05	0.23	0.10	0.05	0.06	0.15	0.15	0.30	0.15	0.20	0.01
49	0.10	0.05	0.05	0.10	0.05	0.01	0.15	0.15	0.20	0.15	0.20	0.01
50	0.10	0.10	0.05	0.10	0.10	0.24	0.15	0.15	0.20	0.15	0.15	0.30
51	0.10	0.10	0.05	0.15	0.15	0.05	0.15	0.15	0.20	0.15	0.15	0.20
52	0.10	0.10	0.10	0.15	0.15	0.10	0.15	0.15	0.20	0.15	0.15	0.20
53	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
54	0.20	0.20	0.20	0.40	0.40	0.40	0.20	0.20	0.20	0.40	0.40	0.40
55	1.00	1.00	1.00	0.40	0.40	0.40	1.00	1.00	1.00	0.40	0.40	0.40
56	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
57	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
58	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
59	1.00	1.00	1.00	0.20	0.20	0.20	1.00	1.00	1.00	0.20	0.20	0.20
60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Age retirement rates for AFPS15 scheme members

Age at joining	AFPS15 Officers (Unprotected)			AFPS15 Other Ranks (Unprotected)		
	20	25	30	20	25	30
Age						
40	0.30	0.00	0.00	0.30	0.00	0.00
41	0.05	0.00	0.00	0.20	0.00	0.00
42	0.05	0.00	0.00	0.20	0.00	0.00
43	0.05	0.00	0.00	0.20	0.00	0.00
44	0.05	0.00	0.00	0.20	0.00	0.00
45	0.10	0.30	0.00	0.15	0.30	0.00
46	0.10	0.05	0.00	0.15	0.20	0.00
47	0.10	0.05	0.00	0.15	0.20	0.00
48	0.10	0.05	0.00	0.15	0.20	0.00
49	0.10	0.05	0.00	0.15	0.20	0.00
50	0.10	0.10	0.30	0.15	0.15	0.30
51	0.15	0.15	0.05	0.15	0.15	0.20
52	0.15	0.15	0.10	0.15	0.15	0.20
53	0.15	0.15	0.15	0.15	0.15	0.15
54	0.20	0.20	0.20	0.20	0.20	0.20
55	0.20	0.20	0.20	0.20	0.20	0.20
56	0.20	0.20	0.20	0.20	0.20	0.20
57	0.20	0.20	0.20	0.20	0.20	0.20
58	0.20	0.20	0.20	0.20	0.20	0.20
59	0.20	0.20	0.20	0.20	0.20	0.20
60	1.00	1.00	1.00	1.00	1.00	1.00

Rates of leaving service

Rates of leaving service for AFPS75 scheme members

Age at joining	AFPS75 Officers (Protected)			AFPS75 Officers (Unprotected)			AFPS75 Other Ranks (Protected)			AFPS75 Other Ranks (Unprotected)		
	20	25	30	20	25	30	20	25	30	20	25	30
Age												
20	0.00*			0.00*			0.25			0.25		
25	0.03	0.05		0.03	0.05		0.10	0.25		0.10	0.25	
30	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.10	0.25	0.05	0.10	0.25
35	0.01	0.04	0.04	0.01	0.04	0.04	0.03	0.05	0.10	0.03	0.05	0.10
40	0.00	0.01	0.04	0.00	0.01	0.04	0.01	0.03	0.05	0.00	0.03	0.05
45	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.03	0.00	0.00	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* For AFPS 75 Officers (Protected) and AFPS75 Officers (Unprotected) we assume that 0.05 leave at age 21.

Rates of leaving service for AFPS05 scheme members

Age at joining	AFPS05 Officers (Protected)			AFPS05 Officers (Unprotected)			AFPS05 Other Ranks (Protected)			AFPS05 Other Ranks (Unprotected)		
	20	25	30	20	25	30	20	25	30	20	25	30
Age												
20	0.00*			0.00*			0.25			0.25		
25	0.03	0.05		0.03	0.05		0.10	0.25		0.10	0.25	
30	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.10	0.25	0.05	0.10	0.25
35	0.02	0.04	0.04	0.02	0.04	0.04	0.03	0.05	0.10	0.03	0.05	0.10
40	0.00	0.01	0.04	0.00	0.01	0.04	0.00	0.03	0.05	0.00	0.03	0.05
45	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.00	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* For AFPS 05 Officers (Protected) and AFPS05 Officers (Unprotected) we assume that 0.05 leave at age 22.

Rates of leaving service for AFPS15 scheme members

Age at joining	AFPS15 Officers (Unprotected)			AFPS15 Other Ranks (Unprotected)		
	20	25	30	20	25	30
Age						
20	0.09			0.25		
25	0.04	0.09		0.10	0.25	
30	0.04	0.04	0.09	0.05	0.10	0.25
35	0.01	0.04	0.04	0.03	0.05	0.10
40	0.00	0.01	0.04	0.00	0.03	0.05
45	0.00	0.00	0.01	0.00	0.00	0.03
50	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00

Promotional pay increases

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

Service (years)	AFPS 05, AFPS 15 and AFPS 75 pensionable pay		AFPS 75 representative pay	
	Officers	Other ranks	Officers	Other ranks
0	100	100	100	100
5	154	147	104	112
10	188	180	115	123
15	215	204	128	136
20	233	229	144	143
25	256	236	162	148
30	280	245	178	153
35	280	263	178	153
40	280	263	178	153

Rates of ill-health retirement

Age	Officers			Other ranks		
	AFPS 05 and AFPS 15		AFPS 75	AFPS 05 and AFPS 15		AFPS 75
	Tier 1	Tier 2/3		Tier 1	Tier 2/3	
20	0.0000	0.0000	0.0000	0.0045	0.0015	0.0060
25	0.0015	0.0005	0.0020	0.0079	0.0026	0.0105
30	0.0015	0.0005	0.0020	0.0098	0.0033	0.0130
35	0.0015	0.0005	0.0020	0.0083	0.0028	0.0110
40	0.0015	0.0005	0.0020	0.0064	0.0021	0.0085
45	0.0023	0.0008	0.0030	0.0068	0.0023	0.0090
50	0.0030	0.0010	0.0040	0.0056	0.0019	0.0075
55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

For AFPS 05 and AFPS 15 ill-health retirements, 75% are assumed to be on Tier 1, 15% on Tier 2 and 10% on Tier 3.

Mortality before retirement for all members

Age	Males	Female
20	0.0004	0.0002
25	0.0005	0.0002
30	0.0006	0.0003
35	0.0009	0.0004
40	0.0012	0.0007
45	0.0017	0.0010
50	0.0025	0.0017
55	0.0040	0.0025

Family statistics

Recommended proportion married or partnered at retirement for current pensioners

Age at retirement	AFPS75 Officers		AFPS75 Other Ranks	
	Male	Female	Male	Female
50	90%	65%	75%	60%
60	90%	65%	75%	60%
70	90%	52%	75%	48%
80	75%	26%	62%	24%
90	43%	8%	35%	7%

Age at retirement	AFPS05 and AFPS15 Officers		AFPS05 and AFPS15 Other Ranks	
	Male	Female	Male	Female
50	95%	70%	80%	65%
60	95%	68%	80%	63%
70	93%	53%	78%	50%
80	76%	26%	64%	24%
90	43%	8%	36%	7%

Recommended proportion married or partnered at retirement for future pensioners

Age at retirement	AFPS75 Officers		AFPS75 Other Ranks	
	Male	Female	Male	Female
All ages	90%	65%	75%	60%

Age at retirement	AFPS05 and AFPS15 Officers		AFPS05 and AFPS15 Other	
	Male	Female	Male	Female
All ages	95%	70%	80%	65%

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

27 November 2023