



Firefighters' Pension Schemes (Northern Ireland)

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 13 February 2024 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 Firefighters' Pension Schemes (Northern Ireland) 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
Current pensioners in normal health and ill-health	S3NMA_M	109%
Future pensioners in normal health and ill-health	S3NMA_M	109%
Dependants	S3DFA	99%

As specified by the Department of Finance (DoF), future improvements in mortality will be assumed to be in line with those underlying the ONS 2020 projections.



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	FPS 2007 Scheme only	NFPS 2007 Scheme only	NFPS 2007 Scheme (Special) only	FPS 2015 Scheme only
Scheme pension commuted from	FPS 2007	NFPS 2007	NFPS 2007 (Special)	FPS 2015
All members	0%	20%	0%	20%

Member with service in the following schemes	Mixed FPS 2007 Scheme and FPS 2015 Scheme		Mixed NFPS 2007 Scheme and FPS 2015 Scheme		Mixed NFPS 2007 Scheme (Special) and FPS 2015 Scheme	
Scheme pension commuted from	FPS 2007	FPS 2015	NFPS 2007	FPS 2015	NFPS 2007 (Special)	FPS 2015
All members	0%	12%	20%	20%	0%	12%

In respect of benefits relating to the Matthews second option exercise, 25% of pensions are assumed to be commuted for cash.

Retirement ages

Age retirement rates for FPS 2007 scheme members

Age at joining	18	19	20	21	22	23	24	25	26	27	28	29	30 and over
Age													
50	0.795	0.795	0.795	0.250	0.250	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000
51	0.490	0.490	0.490	0.795	0.020	0.020	0.020	0.020	0.050	0.000	0.000	0.000	0.000
52	0.490	0.490	0.490	0.490	0.915	0.020	0.020	0.020	0.020	0.050	0.000	0.000	0.000
53	0.490	0.490	0.490	0.490	0.490	0.975	0.020	0.020	0.020	0.020	0.050	0.000	0.000
54	0.490	0.490	0.490	0.490	0.490	0.490	0.975	0.020	0.020	0.020	0.020	0.050	0.000
55	0.660	0.660	0.660	0.680	0.705	0.725	0.750	0.975	0.410	0.410	0.410	0.410	0.410
56	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.975	0.410	0.410	0.410	0.410
57	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.975	0.410	0.410	0.410
58	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.975	0.410	0.410
59	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.655	0.975	0.410
60 and over	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Age retirement rates for NFPS 2007 Scheme members and new entrants to the FPS 2015 Scheme

Retirement Age	NFPS 2007 Scheme Standard (protected and unprotected)	NFPS 2007 Scheme Special (protected and unprotected)	FPS 2015 Scheme (new entrants)
55	-	1.000	1.000
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	1.000	-	-

Rates of leaving service

Age	Withdrawal rate	
	Regular Firefighters and Special Retained Firefighters	Standard Retained Firefighters
20	0.0159	0.0239
25	0.0159	0.0239
30	0.0159	0.0239
35	0.0148	0.0221
40	0.0092	0.0137
45	0.0051	0.0077
50	0.0028*	0.0043
55	0.0000	0.0000

* Rates are zero at age 50 if the member is eligible to retire on an unreduced pension

Promotional pay increases

Regular firefighter members

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

Service (years)	Promotional Pay for Regular Firefighters
0	100.0
5	140.4
10	145.4
15	152.2
20	161.6
25	171.1
30	183.6
35	190.1
40	190.1

Retained firefighter members (Standard and Special)

The salary scale shows assumed pay progression in excess of general wage inflation with an index base of 100 at age 18.

Age	Promotional Pay for Retained Firefighters
20	102.2
25	107.7
30	113.2
35	118.7
40	124.2
45	129.7
50	135.2
55	137.7
60	140.2
65	142.7

Rates of ill-health retirement

Age	Ill-health retirement rate
20	0.00024
25	0.00048
30	0.00093
35	0.00189
40	0.00384
45	0.00780
50	0.01578
55*	0.03069
59*	0.03417

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

20% of members retiring on ill-health grounds will receive the upper-tier benefits and the remaining 80% will receive the lower-tier benefits.

Mortality before retirement

Age	Death before retirement
20	0.00014
25	0.00015
30	0.00021
35	0.00028
40	0.00038
45	0.00054
50	0.00079
55	0.00128
60	0.00196
65	0.00308

Family statistics

Proportion married or partnered at retirement for future pensioners

Proportion married	Proportion married or partnered
75%	80%

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

Age	Proportion married	Proportion married or partnered
50	75%	80%
60	75%	80%
70	75%	78%
80	63%	64%
90	36%	36%

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

Matthews second options exercise assumptions

Eligible firefighters

Total number of firefighters eligible for the second Matthews options exercise
830

Firefighter profile

Pattern of employment and ages
Estimated for the eligible population based on data from the first Matthews options exercise

Pay history

Ratio of earnings (where actual pay is not known)
30% of reference pay

Assumed take-up rates

Membership group	Take-up
Members who opted for the first Matthews options exercise	100%
Others aged 55 and above	60%
Others below age 55	50%
Overall	~80%

13 February 2024