

## Updated Mortality Improvement Rates and Static Mortality Tables for Defined Benefit Pension Plans for 2019

Notice 2018-02

### PURPOSE

This notice specifies updated mortality improvement rates and static mortality tables to be used for defined benefit pension plans under § 430(h)(3)(A) of the Internal Revenue Code (Code) and section 303(h)(3)(A) of the Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406, as amended (ERISA). These updated mortality improvement rates and static tables, which are being issued pursuant to the regulations under § 430(h)(3)(A), apply for purposes of calculating the funding target and other items for valuation dates occurring during calendar year 2019.

This notice also includes a modified unisex version of the mortality tables for use in determining minimum present value under § 417(e)(3) of the Code and section 205(g)(3) of ERISA for distributions with annuity starting dates that occur during stability periods beginning in the 2019 calendar year.

### BACKGROUND

Section 412 of the Code provides minimum funding requirements that generally apply for defined benefit plans. Section 412(a)(2) provides that § 430 specifies the minimum funding requirements that generally apply to defined benefit plans that are not multiemployer plans. Section 430(a) defines the minimum required contribution for such a plan by reference to the plan's funding target for the plan year. Under § 430(d)(1), a plan's funding target for a plan year generally is the present value of all benefits accrued or earned under the plan as of the first day of that plan year.

Section 430(h)(3) provides rules regarding the mortality tables that are generally used under § 430. Under § 430(h)(3)(A), except as provided in § 430(h)(3)(C) or (D), the Secretary is to prescribe by regulation mortality tables to be used in determining any present value or making any computation under § 430. Those tables are to be based on the actual experience of pension plans and projected trends in that experience. Section 430(h)(3)(B) requires the Secretary to revise any table in effect under § 430(h)(3)(A) at least every 10 years to reflect the actual experience of pension plans and projected trends in that experience.

Section 430(h)(3)(C) provides that, upon request by a plan sponsor and approval by the Secretary, substitute mortality tables that meet the applicable requirements may be used in lieu of the standard mortality tables provided under § 430(h)(3)(A). Section 430(h)(3)(D) provides for the use of separate mortality

tables with respect to certain individuals who are entitled to benefits on account of disability.

### ***Mortality Tables for Purposes of § 430***

On October 5, 2017, the Treasury Department and the Internal Revenue Service amended § 1.430(h)(3)-1 to revise the mortality tables used under § 430(h)(3)(A) for plan years beginning on or after January 1, 2018. T.D. 9826, 82 F.R. 46388. The mortality tables used under § 430(h)(3)(A) are based on the tables in the RP-2014 Mortality Tables Report,<sup>1</sup> adjusted for mortality improvement. Section 1.430(h)(3)-1 sets forth base mortality tables with a base year of 2006.

Section 1.430(h)(3)-1(a) permits plan sponsors to apply the projection of mortality improvement in either of two ways: through use of static tables that are updated annually to reflect expected improvements in mortality, or through use of generational tables. Section 1.430(h)(3)-1(a)(2)(i)(C) provides that, for valuation dates occurring in years after 2018, updated mortality improvement rates that take into account new data for mortality improvement trends of the general population, along with static mortality tables that reflect those updated mortality improvement rates, will be provided through guidance published in the Internal Revenue Bulletin.

### ***Application of These Tables for Other Funding Rules***

Section 1.431(c)(6)-1 provides that the same mortality assumptions that apply for purposes of § 430(h)(3)(A) and § 1.430(h)(3)-1(a)(2) are used to determine a multiemployer plan's current liability for purposes of applying the full-funding rules of § 431(c)(6). For this purpose, a multiemployer plan may apply either the static mortality tables or the generational mortality tables (as updated pursuant to § 1.430(h)(3)-1(a)(2)(i)(C) and (a)(3)).

Section 433 provides the minimum funding standards for CSEC plans, which are described in section 414(y). Section 433(h)(3)(B)(i) provides that the Secretary may by regulation prescribe mortality tables to be used in determining current liability for purposes of § 433(c)(7)(C). Section 1.433(h)(3)-1(a) provides that the mortality tables described in § 430(h)(3)(A) are to be used to determine current liability under § 433(c)(7)(C).

### ***Application of Mortality Tables for Minimum Present Value Requirements under § 417(e)(3)***

Section 417(e)(3) generally provides that the present value of certain accelerated forms of benefit under a qualified pension plan (including single-sum

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<sup>1</sup> The RP-2014 Mortality Tables Report, as revised November 2014, is available at [www.soa.org/Research/Experience-Study/pension/research-2014-rp.aspx](http://www.soa.org/Research/Experience-Study/pension/research-2014-rp.aspx).

distributions) must not be less than the present value of the accrued benefit using applicable interest rates and the applicable mortality table. Section 417(e)(3)(B) defines the term “applicable mortality table” as the mortality table specified for the plan year under § 430(h)(3)(A) (without regard to § 430(h)(3)(C) or (D)), modified as appropriate by the Secretary.

Rev. Rul. 2007-67, 2007-2 CB 1047, provides that, except as otherwise stated in future guidance, the applicable mortality table under § 417(e)(3) is a static mortality table set forth in published guidance that is developed based on a fixed blend of 50 percent of the static male combined mortality rates and 50 percent of the static female combined mortality rates used under § 1.430(h)(3)-1. Rev. Rul. 2007-67 also provides that the applicable mortality table for a calendar year applies to distributions with annuity starting dates that occur during stability periods that begin during that calendar year.

#### MORTALITY IMPROVEMENT RATES FOR 2019

The mortality improvement rates for valuation dates occurring during 2019 are the mortality improvement rates in the Mortality Improvement Scale MP-2017 Report (issued by the Retirement Plans Experience Committee (RPEC) of the Society of Actuaries and available at <http://www.soa.org/Files/Research/Exp-Study/mortality-improvement-scale-mp-2017.pdf>).

#### STATIC MORTALITY TABLES FOR 2019

The static mortality tables that apply under § 430(h)(3)(A) for valuation dates occurring during 2019 are set forth in the appendix to this notice. The mortality rates in these tables have been developed from the base mortality rates and methodology set forth in § 1.430(h)(3)-1(c) and (d) using the mortality improvement rates specified in this notice.

The static mortality table that applies under § 417(e)(3) for distributions with annuity starting dates occurring during stability periods beginning in 2019 is set forth in the appendix to this notice in the column labeled “Unisex.” The mortality rates in this table are derived from the mortality tables specified under § 430(h)(3)(A) for 2019 in accordance with the procedures set forth in Rev. Rul. 2007-67.

#### **Drafting Information**

The principal authors of this notice are Arslan Malik and Linda S. F. Marshall of the Office of the Associate Chief Counsel (Tax Exempt and Government Entities). For further information regarding this notice, contact Arslan Malik or Linda Marshall at (202) 317-6700 (not a toll-free number).

#### **APPENDIX**

## Mortality Tables for 2019

### Valuation Dates Occurring During 2019 and Distributions Subject to § 417(e)(3) with Annuity Starting Dates During Stability Periods Beginning in 2019

Age	MALE	MALE	MALE	FEMALE	FEMALE	FEMALE	UNISEX
	2019 Non- Annuitant Table	2019 Annuitant Table	2019 Optional Combined Table for Small Plans	2019 Non- Annuitant Table	2019 Annuitant Table	2019 Optional Combined Table for Small Plans	2019 Table for Distributions Subject to § 417(e)(3)
0	0.002709	0.002709	0.002709	0.002489	0.002489	0.002489	0.002599
1	0.000159	0.000159	0.000159	0.000156	0.000156	0.000156	0.000158
2	0.000108	0.000108	0.000108	0.000103	0.000103	0.000103	0.000106
3	0.000091	0.000091	0.000091	0.000078	0.000078	0.000078	0.000085
4	0.000071	0.000071	0.000071	0.000059	0.000059	0.000059	0.000065
5	0.000063	0.000063	0.000063	0.000054	0.000054	0.000054	0.000059
6	0.000057	0.000057	0.000057	0.000050	0.000050	0.000050	0.000054
7	0.000051	0.000051	0.000051	0.000047	0.000047	0.000047	0.000049
8	0.000044	0.000044	0.000044	0.000043	0.000043	0.000043	0.000044
9	0.000036	0.000036	0.000036	0.000041	0.000041	0.000041	0.000039
10	0.000030	0.000030	0.000030	0.000039	0.000039	0.000039	0.000035
11	0.000032	0.000032	0.000032	0.000040	0.000040	0.000040	0.000036
12	0.000049	0.000049	0.000049	0.000047	0.000047	0.000047	0.000048
13	0.000065	0.000065	0.000065	0.000053	0.000053	0.000053	0.000059
14	0.000081	0.000081	0.000081	0.000059	0.000059	0.000059	0.000070
15	0.000097	0.000097	0.000097	0.000066	0.000066	0.000066	0.000082
16	0.000114	0.000114	0.000114	0.000071	0.000071	0.000071	0.000093
17	0.000132	0.000132	0.000132	0.000076	0.000076	0.000076	0.000104
18	0.000151	0.000151	0.000151	0.000080	0.000080	0.000080	0.000116
19	0.000171	0.000171	0.000171	0.000084	0.000084	0.000084	0.000128
20	0.000190	0.000190	0.000190	0.000084	0.000084	0.000084	0.000137
21	0.000215	0.000215	0.000215	0.000087	0.000087	0.000087	0.000151
22	0.000240	0.000240	0.000240	0.000089	0.000089	0.000089	0.000165
23	0.000257	0.000257	0.000257	0.000093	0.000093	0.000093	0.000175
24	0.000269	0.000269	0.000269	0.000096	0.000096	0.000096	0.000183
25	0.000260	0.000260	0.000260	0.000100	0.000100	0.000100	0.000180
26	0.000256	0.000256	0.000256	0.000104	0.000104	0.000104	0.000180
27	0.000256	0.000256	0.000256	0.000109	0.000109	0.000109	0.000183
28	0.000261	0.000261	0.000261	0.000115	0.000115	0.000115	0.000188
29	0.000271	0.000271	0.000271	0.000122	0.000122	0.000122	0.000197
30	0.000284	0.000284	0.000284	0.000132	0.000132	0.000132	0.000208
31	0.000300	0.000300	0.000300	0.000144	0.000144	0.000144	0.000222
32	0.000317	0.000317	0.000317	0.000156	0.000156	0.000156	0.000237
33	0.000336	0.000336	0.000336	0.000170	0.000170	0.000170	0.000253
34	0.000352	0.000352	0.000352	0.000185	0.000185	0.000185	0.000269
35	0.000368	0.000368	0.000368	0.000200	0.000200	0.000200	0.000284
36	0.000382	0.000382	0.000382	0.000214	0.000214	0.000214	0.000298

Age	MALE	MALE	MALE	FEMALE	FEMALE	FEMALE	UNISEX
	2019 Non- Annuitant Table	2019 Annuitant Table	2019 Optional Combined Table for Small Plans	2019 Non- Annuitant Table	2019 Annuitant Table	2019 Optional Combined Table for Small Plans	2019 Table for Distributions Subject to § 417(e)(3)
37	0.000396	0.000396	0.000396	0.000232	0.000232	0.000232	0.000314
38	0.000413	0.000413	0.000413	0.000250	0.000250	0.000250	0.000332
39	0.000433	0.000433	0.000433	0.000271	0.000271	0.000271	0.000352
40	0.000457	0.000457	0.000457	0.000294	0.000294	0.000294	0.000376
41	0.000485	0.000491	0.000485	0.000318	0.000316	0.000318	0.000402
42	0.000520	0.000566	0.000520	0.000346	0.000366	0.000346	0.000433
43	0.000565	0.000683	0.000567	0.000378	0.000443	0.000378	0.000473
44	0.000618	0.000841	0.000622	0.000415	0.000547	0.000415	0.000519
45	0.000682	0.001043	0.000690	0.000456	0.000680	0.000458	0.000574
46	0.000757	0.001289	0.000771	0.000504	0.000846	0.000510	0.000641
47	0.000843	0.001585	0.000867	0.000558	0.001047	0.000570	0.000719
48	0.000940	0.001936	0.000976	0.000617	0.001287	0.000639	0.000808
49	0.001050	0.002348	0.001103	0.000682	0.001569	0.000719	0.000911
50	0.001173	0.002827	0.001248	0.000756	0.001898	0.000813	0.001031
51	0.001310	0.003069	0.001398	0.000837	0.002016	0.000906	0.001152
52	0.001465	0.003330	0.001593	0.000929	0.002160	0.001021	0.001307
53	0.001629	0.003587	0.001816	0.001032	0.002330	0.001155	0.001486
54	0.001812	0.003859	0.002076	0.001148	0.002529	0.001312	0.001694
55	0.002018	0.004151	0.002459	0.001274	0.002758	0.001556	0.002008
56	0.002258	0.004472	0.002961	0.001412	0.003018	0.001871	0.002416
57	0.002539	0.004828	0.003404	0.001560	0.003310	0.002156	0.002780
58	0.002871	0.005224	0.003907	0.001718	0.003633	0.002461	0.003184
59	0.003260	0.005665	0.004459	0.001885	0.003992	0.002804	0.003632
60	0.003715	0.006157	0.005091	0.002061	0.004382	0.003211	0.004151
61	0.004238	0.006700	0.005798	0.002250	0.004807	0.003734	0.004766
62	0.004836	0.007298	0.006585	0.002452	0.005270	0.004311	0.005448
63	0.005513	0.007956	0.007443	0.002671	0.005769	0.005001	0.006222
64	0.006267	0.008673	0.008277	0.002909	0.006310	0.005644	0.006961
65	0.007108	0.009458	0.009184	0.003171	0.006904	0.006363	0.007774
66	0.007948	0.010323	0.010162	0.003526	0.007562	0.007206	0.008684
67	0.008870	0.011277	0.011159	0.003924	0.008298	0.008021	0.009590
68	0.009892	0.012341	0.012253	0.004370	0.009123	0.008896	0.010575
69	0.011025	0.013534	0.013462	0.004874	0.010052	0.009859	0.011661
70	0.012289	0.014875	0.014808	0.005441	0.011098	0.010906	0.012857
71	0.013703	0.016385	0.016322	0.006083	0.012277	0.012088	0.014205
72	0.015289	0.018089	0.018031	0.006810	0.013609	0.013425	0.015728
73	0.017063	0.020008	0.019954	0.007637	0.015116	0.014939	0.017447
74	0.019059	0.022182	0.022133	0.008570	0.016809	0.016642	0.019388
75	0.021299	0.024640	0.024597	0.009636	0.018736	0.018581	0.021589
76	0.023809	0.027425	0.027387	0.010850	0.020932	0.020795	0.024091
77	0.026632	0.030598	0.030567	0.012238	0.023449	0.023335	0.026951
78	0.029797	0.034205	0.034182	0.013816	0.026334	0.026249	0.030216
79	0.033337	0.038308	0.038295	0.015613	0.029650	0.029602	0.033949

