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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG-112324-15]

RIN 1545-BM71

Mortality Tables for Determining Present Value Under Defined Benefit Pension Plans

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking and notice of public hearing.

SUMMARY: This document contains proposed regulations prescribing mortality tables to be used by most defined benefit pension plans. The tables specify the probability of survival year-by-year for an individual based on age, gender, and other factors. This information is used (together with other actuarial assumptions) to calculate the present value of a stream of expected future benefit payments for purposes of determining the minimum funding requirements for the plan. These mortality tables are also relevant to determining the minimum required amount of a lump-sum distribution from such a plan. In addition, this document contains proposed regulations to update the requirements that a plan sponsor must meet in order to obtain IRS approval to use mortality tables specific to the plan for minimum funding purposes (instead of the generally applicable mortality tables). These regulations affect participants in, beneficiaries of, employers maintaining, and administrators of certain retirement plans.

DATES: Comments and outlines of topics to be discussed at the public hearing scheduled for April 13, 2017 must be received by March 29, 2017.

ADDRESSES: Send submissions to: CC:PA:LPD:PR (REG-112324-15), Room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044. Submissions

may be hand-delivered Monday through Friday between the hours of 8 a.m. and 4 p.m. to CC:PA:LPD:PR (REG-112324-15), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC 20224, or sent electronically, via the Federal eRulemaking Portal at www.regulations.gov (IRS REG-112324-15). The public hearing will be held in the IRS Auditorium, Internal Revenue Building, 1111 Constitution Avenue NW., Washington, DC 20224.

FOR FURTHER INFORMATION CONTACT:

Concerning the regulations, Thomas Morgan at (202) 317-6700; concerning the construction of the base mortality tables and the static mortality tables for 2018, Michael Spaid at (206) 946-3480; concerning submission of comments, the hearing, and/or to be placed on the building access list to attend the hearing, Regina Johnson at (202) 317-6901 (not toll-free numbers).

SUPPLEMENTARY INFORMATION:

Background

A. Generally applicable mortality tables

Section 412 of the Internal Revenue Code (Code) prescribes minimum funding requirements for defined benefit pension plans. Section 430, which was added to the Code by the Pension Protection Act of 1996, Public Law 109-280 (120 Stat. 780 (2006)), specifies the minimum funding requirements that apply generally to defined benefit plans that are not multiemployer plans.¹ Section 430(a) defines the minimum required contribution by reference to the plan's funding target for the plan year. Under section 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.

¹ Section 302 of the Employee Retirement Income Security Act of 1974, Public Law 93-406, as amended (ERISA) sets forth funding rules that are parallel to those in section 412 of the Code, and section 303 of ERISA sets forth additional funding rules for defined benefit plans (other than multiemployer plans) that are parallel to those in section 430 of the Code. Under section 101 of Reorganization Plan No. 4 of 1978 (43 FR 47713) and section 302 of ERISA, the Secretary of the Treasury has interpretive jurisdiction over the subject matter addressed in these proposed regulations for purposes of ERISA, as well as the Code. Thus, these proposed Treasury regulations issued under section 430 of the Code apply as well for purposes of section 303 of ERISA.

Section 430(h)(3) contains rules regarding the mortality tables to be used under section 430. Under section 430(h)(3)(A), except as provided in section 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 section 430. Those mortality tables are to be based on the actual mortality experience of pension plan participants and projected trends in that experience. In prescribing those mortality tables, the Secretary is required to take into account results of available independent studies of mortality of individuals covered by pension plans.² Under section 430(h)(3)(B), the Secretary is required to revise any mortality table in effect under section 430(h)(3)(A) at least every 10 years to reflect actual mortality experience of pension plan participants and projected trends in that experience.

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. These separate mortality tables are permitted to be used with respect to disabled individuals in lieu of the generally applicable mortality tables provided pursuant to section 430(h)(3)(A) or the substitute mortality tables under section 430(h)(3)(C). The Secretary is to establish separate tables for individuals with disabilities occurring in plan years beginning before January 1, 1995, and in later plan years, with the mortality tables for individuals with disabilities occurring in those later plan years applying only to individuals who are disabled within the meaning of Title II of the Social Security Act.

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

² The standards prescribed for developing these mortality tables are the same as the standards that are prescribed for developing mortality tables for multiemployer plans under section 431(c)(6)(D)(iv)(II) (which are used to determine current liability in order to determine the minimum full funding limitation under section 431(c)(6)(B)). These standards also apply for purposes of determining current liability in order to determine the minimum full funding limitation under section 433(c)(2)(C) for a CSEF plan (as defined in section 414(y)).

defines the term “applicable mortality table” as the mortality table specified for the plan year for minimum funding purposes under section 430(h)(3)(A) (without regard to the rules for substitute mortality tables under section 430(h)(3)(C) or mortality tables for disabled individuals under section 430(h)(3)(D)), modified as appropriate by the Secretary. The modifications made by the Secretary to the section 430(h)(3)(A) mortality table to determine the section 417(e)(3)(B) applicable mortality table are not addressed in these proposed regulations. Revenue Ruling 2007–67, 2007–2 CB 1047, describes the modifications that are currently applied to determine the section 417(e)(3)(B) applicable mortality table.

Final regulations under section 430(h)(3) were published in the **Federal Register** on July 31, 2008 in TD 9419, 73 FR 44632. The final regulations issued in 2008 include rules regarding generally applicable mortality tables, which are set forth in § 1.430(h)(3)–1 (the 2008 general mortality table regulations). The final regulations issued in 2008 also include rules regarding substitute mortality tables, which are set forth in § 1.430(h)(3)–2 (the 2008 substitute mortality table regulations).

The 2008 general mortality table regulations prescribe a base mortality table and a set of mortality improvement rates, which may be reflected through the use of either generational mortality tables or static mortality tables. Generational mortality tables are a series of mortality tables, one for each year of birth, each of which fully reflects projected trends in mortality rates. The static mortality tables (which are updated annually) use a single mortality table for all years of birth to approximate the present value that would be determined using the generational mortality tables. Section 1.430(h)(3)–1 includes static mortality tables for valuation dates occurring in 2008 and provides that static mortality tables for valuation dates occurring in later years are to be published in the Internal Revenue Bulletin.

The mortality tables included in § 1.430(h)(3)–1 are based on the mortality tables included in the RP–2000 Mortality Tables Report (referred to in this preamble as the RP–2000 mortality tables) released by the Society of Actuaries in July 2000 (updated in May 2001) and a set of mortality improvement projection factors (the Scale AA Projection Factors) that was also included in the RP–2000 Mortality Tables Report.

Section 1.431(c)(6)–1 provides that the same mortality assumptions that apply for purposes of section 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 section 431(c)(6). For this purpose, a multiemployer plan is permitted to apply either the annually-adjusted static mortality tables or the generational mortality tables.

Static mortality tables for valuation dates occurring during 2009–2013 were published in Notice 2008–85, 2008–42 IRB 905. Updated static mortality tables for valuation dates occurring during 2014 and 2015 were published in Notice 2013–49, 2013–32 IRB 127. Updated static mortality tables for valuation dates occurring in 2016 were published in Notice 2015–53, 2015–33 IRB 190. Updated static mortality tables for valuation dates occurring in 2017 were published in Notice 2016–50, 2016–38 IRB 371.

Notice 2013–49 requested comments on whether it continues to be necessary to provide multiple alternative versions of the mortality tables in order to accommodate limitations in some actuarial software. Notice 2013–49 also requested comments on whether a separate disability mortality table is still warranted with respect to participants who became disabled before 1995. Finally, Notice 2013–49 noted that the Treasury Department (Treasury) and the IRS were aware that the Society of Actuaries was conducting a mortality study of pension plan participants and specifically requested comments on whether other studies of actual mortality experience of pension plan participants and projected trends of that experience are available that should be considered for use in developing mortality tables for future use under section 430(h)(3).

In October 2014, the Retirement Plans Experience Committee (RPEC) of the Society of Actuaries issued a new mortality study of participants in private pension plans, referred to as the RP–2014 Mortality Tables Report (which sets forth mortality tables that are referred to as the RP–2014 mortality tables). The RP–2014 Mortality Tables Report, as revised November 2014, is available at www.soa.org/Research/Experience-Study/pension/research-2014-rp.aspx. At the same time, RPEC issued a companion study of mortality improvement, referred to as the Mortality Improvement Scale MP–2014 Report (which sets forth mortality improvement rates that are referred to as Scale MP–2014 Rates). As described in the Mortality Improvement Scale MP–

2014 Report, (available at www.soa.org/Research/Experience-Study/pension/research-2014-mp.aspx), the Scale MP–2014 rates were based on mortality improvement experience for the general population through 2009.

In October 2015, RPEC released an update to the Scale MP–2014 Rates. The updated rates, referred to as Scale MP–2015 Rates, were released as part of the Mortality Improvement Scale MP–2015 Report (which is available at <https://www.soa.org/Research/Experience-Study/Pension/research-2015-mp.aspx>). The Scale MP–2015 Rates were created using historical data for mortality improvement for the general population through 2011, and the same model and parameters that were used to produce Scale MP–2014 Rates. In conjunction with the release of the updated rates, RPEC indicated the intent to reflect the latest data available by providing future annual updates to the model as soon as practicable following the public release of updated data upon which the model is constructed.

In October 2016, RPEC released a further update to the Scale MP–2014 Rates, which are referred to as the Scale MP–2016 Rates. The Scale MP–2016 Rates take into account data for mortality improvement for the general population for years 2012 and 2013, along with an estimate of mortality rates for 2014. As described in the Mortality Improvement Scale MP–2016 Report (which is available at www.soa.org/Research/Experience-Study/Pension/research-2016-mp.aspx), in developing the Scale MP–2016 rates, RPEC changed some of the parameters from those that were used in developing the Scale MP–2014 Rates.

B. Plan-Specific Substitute Mortality Tables

Section 430(h)(3)(C) prescribes rules for a plan sponsor’s use of substitute mortality tables reflecting the specific mortality experience of a plan’s population instead of using the generally applicable mortality tables. Under section 430(h)(3)(C), the plan sponsor may request the Secretary’s approval to use plan-specific substitute mortality tables that meet requirements specified in the statute. If approved, these substitute mortality tables are used to determine present values and make computations under section 430 during the period of consecutive plan years (not to exceed 10) specified in the request. In order for a plan sponsor to use a substitute mortality table for a plan, the statute requires that: (1) The plan has a sufficient number of plan participants and has been maintained for a sufficient period of time in order

to have credible mortality information necessary to create a substitute mortality table; and (2) the tables reflect the actual mortality experience of the plan's participants and projected trends in general mortality experience of participants in pension plans. Except as provided by the Secretary, a plan sponsor must not use substitute mortality tables for any plan unless substitute mortality tables are established and used for each plan maintained by the plan sponsor and its controlled group.

Regulations issued in 2008 set forth rules regarding the use of substitute mortality tables. Under § 1.430(h)(3)–2(b), in order to use substitute mortality tables with respect to a plan, a plan sponsor must submit a written request to the Commissioner that demonstrates that those substitute mortality tables comply with applicable requirements. A request to use substitute mortality tables must specify the first plan year, and the term of years (not more than 10), for which the tables are requested to be used. In general, substitute mortality tables may not be used for a plan year unless the plan sponsor submits the request at least 7 months prior to the first day of the first plan year for which the substitute mortality tables are to apply.

The Commissioner has a 180-day period to review a request for the use of substitute mortality tables. If the Commissioner does not issue a denial within this 180-day period, the request is deemed to have been approved unless the Commissioner and the plan sponsor have agreed to extend that period. The Commissioner may request additional information with respect to a submission. Failure to provide that information on a timely basis is grounds for denial of the plan sponsor's request. In addition, the Commissioner will deny a request if the request fails to meet the requirements to use substitute mortality tables or if the Commissioner determines that a substitute mortality table does not sufficiently reflect the mortality experience of the applicable plan population.

Under § 1.430(h)(3)–2(c)(1)(i), substitute mortality tables must reflect the actual mortality experience of the pension plan for which the tables are to be used. Separate mortality tables must be established for each gender under the plan, and a substitute mortality table may be established for a gender only if the plan has credible mortality experience with respect to that gender. If the mortality experience for one gender is credible but the mortality experience for the other gender is not credible, the substitute mortality tables

are used for the gender that has credible mortality experience, and the mortality tables under § 1.430(h)(3)–1 are used for the gender that does not have credible mortality experience.

Section 1.430(h)(3)–2(c)(1)(ii) provides that, for purposes of determining whether substitute mortality tables may be used, there is credible mortality experience for a gender within a plan if and only if, over the period covered by the experience study, there are at least 1,000 deaths within that gender.³ Pursuant to § 1.430(h)(3)–2(c)(2)(ii), the minimum length of the experience study period is 2 years and the maximum length of the experience study period is 5 years (and can be lengthened in published guidance). Furthermore, under that provision, the last day of the final year reflected in the experience data must be less than three years before the first day of the first plan year for which the substitute mortality tables are to apply.

Under § 1.430(h)(3)–2(c)(2), development of a substitute mortality table under the regulations requires creation of a base table and identification of a base year, which are then used to determine a substitute mortality table. The base table must be developed from a study of the mortality experience of the plan using amounts-weighted data.

Under § 1.430(h)(3)–2(c)(3), a plan's substitute mortality tables must be generational mortality tables. Substitute mortality tables are determined using the base mortality tables developed from the experience study and the Scale AA Projection Factors, which are also used for the generally applicable mortality tables.

Under § 1.430(h)(3)–2(c)(4), separate substitute mortality tables are permitted (but not required) to be established for separate populations within a gender, such as annuitants and nonannuitants or hourly and salaried individuals. Under that provision, separate substitute mortality tables generally are permitted to be used for a separate population within a gender under a plan only if all individuals of that gender in the plan are divided into separate populations, each separate population has credible mortality experience (determined in the same manner as determining whether a gender has

credible mortality experience), and the separate substitute mortality table for each separate population is developed using mortality experience data for that population.

Section 1.430(h)(3)–2(d)(3) prescribes rules for aggregating plans for purposes of using substitute mortality tables. Under § 1.430(h)(3)–2(d)(3), in order to use a set of substitute mortality tables for two or more plans, the rules set forth in the regulations must be applied by treating those plans as a single plan. In such a case, the substitute mortality tables must be used for all such plans and must be based on data collected with respect to all such plans.

Section 1.430(h)(3)–2(d)(4) provides for the early termination of the use of substitute mortality tables in certain specified circumstances, including pursuant to a replacement of the mortality tables specified in § 1.430(h)(3)–1. The early termination pursuant to such a replacement must be effective as of a date specified in guidance published in the Internal Revenue Bulletin.

Rev. Proc. 2008–62, 2008–2 CB 935, sets forth the procedure by which a plan sponsor of a defined benefit plan may request and obtain approval for the use of plan-specific substitute mortality tables in accordance with section 430(h)(3)(C). The revenue procedure specifies the information that must be provided in order to request the use of substitute mortality tables and specifies two alternative acceptable methods of construction for base substitute mortality tables. Under section 11 of Rev. Proc. 2008–62, a base table for a population can be created from the unadjusted base table for the population through the application of a graduation method generally used by the actuarial profession in the United States (for example, the Whittaker-Henderson Type B graduation method or the Karup-King graduation method). Section 12 of Rev. Proc. 2008–62 provides for an alternative method of constructing a base table through the application of a fixed percentage to the mortality rates of a standard mortality table, projected to the base year. This alternative method can be used only if the IRS determines that the resulting base table sufficiently reflects the mortality experience of the applicable plan population. In general, the standard mortality table that is used under this alternative method is a projection of the base mortality table that applies for the population under § 1.430(h)(3)–1; however, the IRS will consider requests for the approval of base tables constructed through the application of a fixed percentage to the

³ The 1,000-death threshold for credible mortality experience under the regulations was intended to provide a high degree of confidence that the plan's past mortality experience will be predictive of its future mortality, and is consistent with relevant actuarial literature (see, for example, Thomas N. Herzog, *Introduction to Credibility Theory* (1999); Stuart A. Klugman, *et. al.*, *Loss Models: From Data to Decisions* (2004)).

mortality rates of other published generally accepted mortality tables.

Section 503 of the Bipartisan Budget Act of 2015, Public Law 114–74, 129 Stat. 584, which was enacted November 2, 2015, provides for changes to the rules on the use of substitute mortality tables. Under that section, the determination of whether a plan has credible information that can be used to develop a substitute mortality table must be made in accordance with established actuarial credibility theory, which (1) is materially different from the rules for using substitute mortality tables (including Revenue Procedure 2007–37)⁴ that are in effect on November 2, 2015; and (2) permits the use of mortality tables that reflect adjustments to the generally applicable mortality tables, if those adjustments are based on the actual experience of the pension plan maintained by the plan sponsor. This provision applies to plan years beginning after December 31, 2015.

Explanation of Provisions

These proposed regulations set forth the methodology Treasury and the IRS would use to update the generally applicable mortality tables that are used to determine present value or make any computation under section 430. Pursuant to section 417(e)(3)(B), a modified version of these updated tables would be used for purposes of determining the amount of a single-sum distribution (or another accelerated form of distribution).⁵ This methodology for developing updated tables under section 430(h)(3)(A) is being proposed pursuant to the requirement under section 430(h)(3)(B) to revise the mortality tables used under section 430 to reflect the actual mortality experience of pension plan participants and projected trends in that experience. As under the 2008 general mortality table regulations, the methodology involves the separate determination of base tables and the projection of mortality improvement.

These proposed regulations also set forth rules for the use of substitute mortality tables. The rules on substitute mortality tables are being proposed pursuant to section 503 of the Bipartisan Budget Act of 2015, which requires that the determination of whether the plan

has credible information be made in accordance with established actuarial credibility theory. Pursuant to that requirement, Treasury and the IRS undertook a review of actuarial literature regarding credibility theory and consulted with experts on that topic from the Society of Actuaries. Based on that review and analysis, the proposed regulations set forth a method for developing substitute mortality tables that is materially different from the method that is required under the 2008 substitute mortality table regulations and the associated revenue procedure.

The method for developing substitute mortality tables that is set forth in the proposed regulations is simpler than the method that applies under the 2008 substitute mortality table regulations, and also accommodates the use of substitute mortality tables by plans with smaller populations that have partially credible mortality experience. Comments are requested regarding additional simplifications that might be appropriate for use in developing substitute mortality tables.

I. Generally Applicable Mortality Tables

A. Base mortality tables

The base mortality tables proposed for use under section 430(h)(3)(A) are derived from the tables contained in the RP–2014 Mortality Tables Report. In response to Notice 2013–49, commentators generally recommended that the RP–2014 mortality tables form the basis for the mortality tables used under section 430.⁶ After reviewing the RP–2014 mortality tables, the accompanying report published by the Society of Actuaries, and related public comments, Treasury and the IRS have determined that the experience study used to develop the RP–2014 mortality tables is the best available study of the actual mortality experience of pension plan participants (other than disabled individuals). Accordingly, the RP–2014 mortality tables are the foundation for the base mortality tables used to project the mortality of pension plan participants under these proposed regulations.⁷

Like the mortality tables provided in the 2008 general mortality table

regulations, the mortality tables set forth in these proposed regulations are gender-distinct because of significant differences between expected male mortality and expected female mortality. In addition, as under the 2008 general mortality table regulations, these proposed regulations set forth separate mortality rates for annuitants and nonannuitants. This distinction has been made because these two groups have significantly different mortality experience. See chapter 3 of the RP–2000 Mortality Tables Report, available at www.soa.org/research/experience-study/pension/research-rp-2000-mortality-tables.aspx.

Under these proposed regulations, the annuitant mortality tables are applied to determine the present value of benefits for an annuitant. For a nonannuitant, the nonannuitant mortality tables are applied for the periods before the participant is projected to commence receiving benefits, and the annuitant mortality tables are used for later periods. With respect to a beneficiary of a participant, the annuitant mortality table applies for the period beginning with each assumed commencement of benefits for the participant. If the participant has died (or to the extent the participant is assumed to die before commencing benefits), the annuitant mortality table applies with respect to the beneficiary for the period beginning with each assumed commencement of benefits for the beneficiary.

The proposed regulations set forth base tables that are to be used to develop the mortality tables for future years. These base tables have a base year of 2006 (the central year of the experience study used to develop the mortality tables in the RP–2014 Mortality Tables Report). These base tables generally have the same rates as the RP–2014 mortality tables after factoring out the mortality improvements from 2007 to 2014 (calculated using the Scale MP–2014 Rates). However, these base tables also include nonannuitant rates for ages below age 18 and above age 80 and annuitant rates for ages below age 50. This generally is the same approach that was used to develop the base tables included in the 2008 general mortality table regulations.

The nonannuitant rates for ages above age 80 were developed by (1) using the annuitant rates from the base tables for ages 90 and older and (2) interpolating between the rates for age 80 and age 90 in order to produce a smooth transition between the age 80 rates from the nonannuitant tables to the age 90 rates from the annuitant tables. The interpolation uses increasing fractions

⁴ Rev. Proc. 2007–37, 2007–1 CB 1433, was not in effect on November 2, 2015. It was issued in 2007 in conjunction with proposed regulations regarding substitute mortality tables (REG–143601–06, 72 FR 29456), and was replaced by Rev. Proc. 2008–62 when those regulations were finalized in 2008.

⁵ After these regulations are finalized, the section 417(e)(3)(B) applicable mortality table will be specified in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

⁶ These proposed regulations also apply the new generally applicable mortality tables under section 430 for purposes of determining the current liability of a multiemployer plan pursuant to section 431(c)(6)(D)(iv)(II) or a GSEC plan pursuant to section 433(h)(3).

⁷ Mortality tables that may be used as an alternative to the tables provided in these regulations with respect to certain disabled individuals are provided in Rev. Rul. 96–7, 1996–1 CB 59.

with a denominator of 55 to allocate the total difference between the rates at ages 80 and 90 over those 10 years. Thus, the rate at age 81 is set equal to the rate at age 80 plus $\frac{1}{55}$ of the total difference, the age 82 rate is equal to the rate at age 81 plus $\frac{2}{55}$ of the total difference (so that the age 82 rate is equal to the rate at age 80 plus $\frac{3}{55}$ of the total difference), and so on for other ages.

A similar approach was used to develop annuitant rates for ages below age 50. The annuitant rates for ages under age 50 were determined by (1) using the nonannuitant rates from the base tables for ages 18 to 40, and (2) interpolating between the rates for age 40 and age 50, using the same methodology described in the prior paragraph. This method produces a smooth transition between the age 40 rates from the nonannuitant table and the age 50 rates from the annuitant table. For ages below age 18, both the annuitant and nonannuitant rates incorporate the juvenile rates from the RP–2014 Mortality Tables Report, after factoring out the mortality improvements from 2007 to 2014 (calculated using the Scale MP–2014 Rates).

B. Reflection of Mortality Improvement

The proposed regulations provide that expected trends in mortality experience must be taken into account through the use of either generational or annually updated static mortality tables. In accordance with section 430(h)(3)(B), the proposed regulations update the mortality improvement rates from the Scale AA Projection Factors that were set forth under the 2008 general mortality table regulations.

In order to select up-to-date mortality improvement rates, Treasury and the IRS reviewed the Mortality Improvement Scale MP–2014 Report, related public comments, the data sources cited in those comments, the Mortality Improvement Scale MP–2015 Report, the Mortality Improvement Scale MP–2016 Report, and other published data sources.⁸ Pursuant to this review, Treasury and the IRS determined that the procedures that RPEC used to develop the Scale MP–2016 Rates generate the most appropriate currently available

⁸ See the August 2013 Literature Review and Assessment of Mortality Improvement Rates in the U.S. Population: Past Experience and Future Long-Term Trends, available at www.soa.org/Files/Research/Exp-Study/research-2013-lit-review.pdf; and the 2015 Technical Panel on Assumptions and Methods Report to the Social Security Advisory Board, available at www.ssab.gov/Details-Page/ArticleID/656/2015-Technical-Panel-on-Assumptions-and-Methods-A-Report-to-the-Board-September-2015.

mortality improvement rates. Accordingly, the proposed regulations provide that, for valuation dates in 2018, the mortality tables for use under section 430(h)(3)(A) must reflect the mortality improvement rates contained in the Mortality Improvement Scale MP–2016 Report.

The Scale MP–2016 Rates are structured as two-dimensional tables that contain mortality improvement rates that vary according to both age and calendar year (so that the mortality improvement rate for someone who is age 72 in 2020 is different than the mortality improvement rate for someone who is age 72 in 2030). RPEC provided for two-dimensional tables of mortality improvement rates in order to reflect differences in mortality improvement at different ages as well as mortality improvement trends that vary for different age cohorts. The proposed regulations include numerical examples illustrating how to apply these two-dimensional mortality improvement rates.

As under the current regulations, the proposed regulations take into account the limitations of some current actuarial software that is not designed to use generational mortality tables. Accordingly, the proposed regulations continue to permit the use of static mortality tables. These static tables consist of a single table for each gender, updated annually, that approximates the effect of projected mortality improvement under the generational mortality tables. The static mortality tables that would be used for 2018 are included in these proposed regulations. For later years, updated static mortality tables will be set forth in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

The static mortality tables that would be permitted to be used under the proposed regulations are constructed from the base tables that are used for purposes of the generational mortality tables. For each calendar year, the static mortality tables are based on a projection of mortality improvement applied to the mortality rates in the base tables for the period beginning with 2006 and ending with the year of the table, with a further projection from that year for a specified projection period. The rates in the static mortality tables are not the expected mortality rates for the current plan year, nor are they the mortality rates under the generational mortality tables that would apply for any current age. Instead, the projection period has been selected so that the use of the static mortality tables to calculate present values produces approximately

the same results as would be calculated using the generational tables. Based on modeling of annuity values at different ages, Treasury and the IRS have selected a projection period of 8 years for males and 9 years for females, with a further adjustment based on age. For ages below 80, the projection period is increased by 1 year for each year below 80. For ages above 80, the projection period is reduced (but not below zero) by $\frac{1}{3}$ year for each year above 80.

These proposed regulations provide an option for smaller plans (plans for which the total number of active and inactive participants and beneficiaries of deceased participants is not more than 500 on the valuation date for the plan year) to use gender distinct blended static tables for all participants and beneficiaries—in lieu of the separate static tables for annuitants and nonannuitants—in order to simplify the actuarial valuation for these plans. These blended tables are constructed from the separate nonannuitant and annuitant static mortality tables using the same nonannuitant and annuitant weighting factors as in the 2008 general mortality table regulations.

Treasury and the IRS understand that RPEC expects to issue updated mortality improvement rates that reflect new data for mortality improvement trends for the general population on an annual basis. Treasury and the IRS expect to take those updates into account in determining the mortality rates to be used under section 430(h)(3) for valuation dates in years after 2018. Those rates will be specified in guidance to be published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

II. Plan-Specific Substitute Mortality Tables

A. Overview

These proposed regulations contain a comprehensive set of rules regarding plan-specific substitute mortality tables. The proposed regulations contain many of the rules regarding substitute mortality tables from the 2008 substitute mortality table regulations. However, after analyzing the actuarial literature regarding credibility theory, Treasury and the IRS propose to make a number of changes to the regulations relating to the development of substitute mortality tables. Specifically, the proposed regulations would require a substitute mortality table to be constructed by multiplying the mortality rates from a projected version of the generally applicable base mortality table by a mortality ratio (that is, a ratio of the actual deaths for the plan population to

expected deaths determined using the standard mortality tables for that population).

Use of mortality ratios (rather than providing for the graduation of raw mortality rates as under the 2008 substitute mortality table regulations) should make it easier for plan sponsors to develop the substitute tables, because it would eliminate the need to apply a graduation technique. It would also make it easier for the IRS to review applications to use substitute mortality tables. This simplification is particularly important in light of the other major change made in the proposed regulations, which would permit the use of substitute mortality tables for a plan that has only partially credible mortality information. Treasury and the IRS expect significantly more plan sponsors to request the use of substitute mortality tables after this change becomes effective.

B. Development of Substitute Mortality Tables for Plans With Full Credibility

The substitute mortality table for a population with full credibility would be determined by applying projected mortality improvement to a base substitute mortality table which is developed using an experience study of the population. The proposed regulations would use the same requirements for an experience study as under the 2008 substitute mortality table regulations. Specifically, the experience study would have to cover a period of at least 2 years (and no more than 5 years) that ends less than 3 years before the first day of the first plan year for which the substitute mortality tables are to apply. As under the 2008 substitute mortality table regulations, the calendar year that contains the day before the midpoint of the experience study is the base year for the base substitute mortality table. In addition, the proposed regulations include the rule in the 2008 substitute mortality table regulations that requires an additional demonstration that the experience study results are predictive of future mortality for a plan population if the number of individuals in that population has changed by more than 20 percent compared to the average number of individuals in that population during the experience study period.

The base substitute mortality table is determined by multiplying the mortality rates from the standard mortality table (that is, the generally applicable base mortality table projected with mortality improvement to the base year for the base substitute mortality table) by the plan's mortality ratio. For this purpose,

the mortality improvement rates that apply for the calendar year during which the plan sponsor submits the request to use substitute mortality tables are used to project the generally applicable base mortality table to the base year for the base substitute mortality table.⁹ The mortality ratio is determined as a fraction, the numerator of which is the number of actual deaths during the experience study period (with each death weighted by the amount of benefit) and the denominator of which is the number of expected deaths during that period (determined using the standard mortality table) weighted by the amount of the benefit. For this purpose, the amount of benefit is the accrued benefit (substituting the current periodic payment in the case of individuals in pay status). Consistent with section 503 of the Bipartisan Budget Act of 2015 (and unlike § 1.430(h)(3)–2(c)(2)(ii)(D) of the 2008 substitute mortality table regulations, which provides that the Commissioner may permit the use of other recognized mortality tables to construct the base substitute mortality table), these proposed regulations provide that the standard mortality table that must be used for this purpose is the generally applicable base mortality table projected with mortality improvement to the base year for the base substitute mortality table.

C. Standards for Full Credibility

The proposed regulations revise the standard for full credibility of a population under the 2008 substitute mortality table regulations (which is 1,000 actual deaths for the relevant population during the experience study period). This is because, under established actuarial credibility theory, that threshold (which is a rounding down of the 1,082 actual deaths that would be needed for a 90% confidence level that the measured rate is within 5% of the underlying rate of mortality) should apply to the credibility for a single rate of mortality and not an entire mortality table.¹⁰ Moreover, the 1,000 death threshold did not take into account the well-established actuarial principle that mortality experience within a population will vary predictably based on the amount of the annuity (or life insurance, as

applicable). The base tables for the generally applicable mortality tables were constructed on an amounts-weighted basis (under which the individuals with higher benefit amounts have a greater weight in the computation of the mortality rate for a particular age); accordingly, substitute mortality tables should be constructed using the same principle.

The variability of benefit amounts for different individuals in different populations within a plan means that a single 1,000 actual-death standard that would apply to all populations is not appropriate. Instead, established actuarial credibility theory would require a plan-specific calculation of the full-credibility standard that takes into account the dispersion of benefits within the plan.

Under the proposed regulations, the number of deaths that are needed for the population within a plan to have fully credible mortality information is determined as the product of 1,082 and the benefit dispersion factor for the population.¹¹ The benefit dispersion factor for a population is equal to the number of expected deaths for the population during the experience study period, times the sum of the mortality-weighted square of the benefits, divided by the square of the mortality-weighted benefits.¹²

D. Partial Credibility

The proposed regulations permit substitute mortality tables to be used for a plan that does not have sufficient deaths to have fully credible mortality information. In accordance with established actuarial credibility theory, such a plan would use a weighted average of the standard mortality table (projected with mortality improvement to the base year of the base substitute mortality table) and the mortality table that would be developed for the plan if it were to have fully credible mortality information. The weight for the mortality table that would apply if the plan were to have fully credible mortality information is the square-root of a fraction, the numerator of which is the actual number of deaths for the population within the experience study period and the denominator of which is the number of deaths needed for the

⁹ If the plan sponsor submits such a request during 2017, then the cumulative mortality improvement factors are determined using the Scale MP–2016 Rates.

¹⁰ Note, however, the use of a graduation technique set forth in Rev. Proc. 2008–62 enables a plan to have credible mortality experience in order to establish a substitute mortality table even though there are fewer than 1000 deaths at each age.

¹¹ This is based on the assumption that the distribution of releases from liability due to deaths follows a compound Poisson model. See www.actuaries.ca/members/publications/2002/202037e.pdf.

¹² See Gavin Benjamin, *Selecting Mortality Tables: A Credibility Approach*, available at www.soa.org/Files/Research/Projects/research-2008-benjamin.pdf.

plan to have fully credible mortality information.

In order to avoid the need to create a substitute mortality table for a plan with a relatively small population, the proposed regulations provide that a population does not have credible mortality information if the actual number of deaths for that population during the experience study period is less than 100. For this purpose, the length of the experience study period must be the same length as the longest experience study period for any plan in the controlled group.

Treasury and the IRS chose the threshold of 100 deaths as a result of balancing the burdens of developing substitute mortality tables and the benefit of the use of those tables, in light of the requirement under section 430(h)(3)(C)(iv) that substitute mortality tables be used for all plans within a controlled group (and the exception to this requirement for plans that lack fully or partially credible mortality information). Comments are requested regarding whether this is the appropriate threshold or whether a different number of deaths should be used for this purpose.

E. Mortality Improvement Rates

As required under the 2008 substitute mortality table regulations, the proposed regulations provide that substitute mortality tables must be generational mortality tables. These proposed regulations require that the mortality improvement rates that are used for the generally applicable mortality tables also be applied beginning with the base year of the base substitute mortality tables.

F. Other Rules Relating to the Use of Substitute Mortality Tables

1. Use of Separate Subpopulations Within a Gender Under Plan

The proposed regulations continue to apply the rules under the 2008 substitute mortality table regulations regarding the applicability of substitute mortality tables for separate populations within a plan. Specifically, separate substitute mortality tables must be developed for each gender under the plan. In addition, the regulations permit separate substitute mortality tables to be developed for separate subpopulations (such as hourly and salaried participants) within a gender under the plan in certain circumstances.

As under the 2008 substitute mortality table regulations, permission to separate a gender into separate subpopulations is generally limited to situations in which each of the

subpopulations have fully credible mortality information. However, that requirement does not apply if the separate subpopulations are annuitants and non-annuitants. Comments are requested on whether there should be other exceptions to this rule. For example:

- Should the regulations allow separate sub-populations to be used if one subpopulation has full credibility while the other one has only partial credibility?
- Should the regulations provide for the use of separate sub-populations based on age, even if those groups have only partial credibility?
- Should there be a rule to “normalize” the mortality tables for separate sub-populations (so that the total number of expected deaths for the separate subpopulations is the same as the total number of expected deaths for the entire population without regard to the separation)?

2. Requirement To Use Substitute Mortality Tables for All Plans With Credible Mortality Information

As under the 2008 substitute mortality table regulations, the proposed regulations provide that substitute mortality tables are permitted to be used for a plan for a plan year only if, for that plan year, substitute mortality tables are also approved and used for each other pension plan subject to the requirements of section 430 that is maintained by the plan sponsor or by a member of the sponsor's controlled group. However, this rule does not prohibit the use of substitute mortality tables for one plan if the only other plan or plans maintained by the plan sponsor (or by a member of the plan sponsor's controlled group) for which substitute mortality tables are not used are too small to have fully or partially credible mortality information for the plan year. Thus, if a sponsor's controlled group contains two pension plans that are subject to section 430, each of which has fully or partially credible mortality information for at least one gender, either the plan sponsors of both plans must obtain approval from the Commissioner to use substitute mortality tables or substitute mortality tables may not be used for either plan. In contrast, if for one of those plans neither males nor females have fully or partially credible mortality information, then the plan without credible mortality information will not prevent the use of substitute mortality tables for the plan with credible mortality information.

As under the 2008 substitute mortality table regulations, the proposed regulations provide that the requirement

that the plan sponsor demonstrate the lack of credible mortality information for both the male and female populations in other plans maintained by the plan sponsor (and by members of the plan sponsor's controlled group) for which substitute mortality tables are not used must be satisfied for each plan year for which substitute mortality tables are used. This demonstration is made for a plan population by showing that the population has not experienced at least 100 deaths over a time period that satisfies the requirements set forth in the regulations. In general, for each plan year in which substitute mortality tables are used for a plan, in order to demonstrate that a gender within a plan does not have credible mortality information for a plan year, the demonstration that the gender within the plan has fewer than 100 deaths must be made by analyzing the actual number of deaths over a period that is the same length as the period for the experience study on which the substitute mortality tables are based and that ends less than three years before the first day of the plan year.

3. Permitted Aggregation of Plans

The proposed regulations retain the rules contained in the 2008 substitute mortality table regulations regarding aggregation of plans for purposes of using substitute mortality tables. Under these rules, in order for a plan sponsor to use the same substitute mortality tables for two or more plans, the rules set forth in the regulations are applied by treating those plans as a single plan. In such a case, the substitute mortality tables must be used for all such plans and must be based on data collected with respect to all such plans. Although plans generally are not required to be aggregated for purposes of substitute mortality tables, the regulations require a plan to be aggregated with any plan that was previously spun off from that plan if the Commissioner determines that one purpose of the spinoff was to avoid the use of substitute mortality tables for any of the plans involved in the spinoff.

4. Special Rules for Newly-Acquired Plans

If substitute mortality tables are used for at least one plan within a controlled group, in order for the plan sponsor to continue to use substitute mortality tables for that plan after a plan joins the controlled group, substitute mortality tables must be used for the newly affiliated plan unless the newly affiliated plan demonstrates that it lacks credible mortality information. However, the proposed regulations

provide for a transition period during which the standard mortality table is permitted to be used for a newly affiliated plan (without affecting the use of substitute mortality tables for other plans within the controlled group) even if the newly affiliated plan fails to demonstrate a lack of credible mortality information. Similarly, the use of substitute mortality tables for a newly affiliated plan is not affected during the transition period merely because the standard mortality tables are used for another plan within the controlled group despite the failure of that other plan to demonstrate a lack of credible mortality information. Notably, these rules do not change the requirement that the continued use of substitute mortality tables for any plan within the controlled group is permitted only if the other pre-affiliation plans within the controlled group for which substitute mortality tables are not used demonstrate a lack of credible mortality information.

Like the 2008 substitute mortality table regulations, the proposed regulations do not require the use of pre-affiliation experience in order to establish whether a newly-affiliated plan has credible mortality information. If the pre-affiliation data is excluded and substitute mortality tables will be used for the plan, then the experience study period may be as short as one year (instead of two years). If the pre-affiliation data is excluded and substitute mortality tables will not be used for the plan, then the experience study period used to demonstrate that the plan does not have credible mortality information may also be shortened, provided that the period ends not more than one year and one day before the first day of the plan year.

5. Treatment of Mortality Experience With Respect to Disabled Individuals

As under the 2008 substitute mortality table regulations, if separate mortality tables under section 430(h)(3)(D) are used for certain disabled individuals under a plan, then those individuals are disregarded for all purposes with respect to substitute mortality tables under section 430(h)(3)(C). Thus, if the mortality tables under section 430(h)(3)(D) are used for certain disabled individuals under a plan, mortality experience with respect to those individuals must be excluded in determining mortality rates for substitute mortality tables with respect to a plan.

6. Early Termination of Use of Substitute Mortality Tables

The proposed regulations retain the rules from the 2008 substitute mortality

table regulations regarding the early termination of use of substitute mortality tables. Under those rules, a plan's substitute mortality tables may not be used beginning with the earliest of: (1) For a plan for which substitute mortality tables are used for only one gender because of a lack of credible mortality information with respect to the other gender, the first plan year for which there is credible mortality information with respect to the gender that had lacked credible mortality information (unless the plan receives approval to use a substitute mortality table for that other gender); (2) the first plan year for which the requirements regarding use of substitute mortality tables by controlled group members are not satisfied; (3) the second plan year following the plan year for which there is a significant change in individuals covered by the plan (unless the plan's actuary certifies in writing to the satisfaction of the Commissioner that the substitute mortality tables used for the plan population continue to be accurately predictive of future mortality of that population (taking into account the effect of the change in the population)); (4) the first plan year following the plan year for which a substitute mortality table used for a plan population is no longer accurately predictive of future mortality of that population, as determined by the Commissioner or as certified by the plan's actuary to the satisfaction of the Commissioner; or (5) the date specified in guidance published in the Internal Revenue Bulletin in conjunction with a replacement of generally applicable mortality tables (other than annual updates to the static mortality tables or changes to the mortality improvement rates).

G. Procedures for Requesting Approval of Substitute Mortality Tables

As under the 2008 substitute mortality table regulations, the proposed regulations provide that a plan sponsor that wishes to use substitute mortality tables for a plan must submit a request to the IRS for approval to use the proposed tables. In general, the request must be submitted at least 7 months before the first day of the plan year for which the proposed substitute tables would be used. If the IRS does not deny the request within 180 days (which may be extended as agreed to by the IRS and the plan sponsor), the request is deemed to have been approved.

The IRS intends to issue an updated version of Rev. Proc. 2008-62 after final regulations regarding substitute mortality tables are issued. If the timing of the release of those final regulations

and the associated revenue procedure does not leave adequate time to submit an application to use substitute mortality tables for the plan year beginning in 2018, Treasury and the IRS expect that they would provide a transition rule that would permit extra time to submit such an application.

Before final regulations adopting the provisions set forth in these proposed regulations are issued, plan sponsors requesting the use of substitute mortality tables should continue to use the procedures set forth in Rev. Proc. 2008-62. During that period, the IRS will not evaluate whether a substitute mortality table for a population with only partially credible mortality information is appropriate.

Applicability Date

These regulations are proposed to apply to plan years beginning on or after January 1, 2018. Under the proposed regulations, a plan sponsor may use a substitute mortality table for a plan year beginning on or after January 1, 2018 only if that substitute mortality table is approved as provided in these proposed regulations.

Statement of Availability of IRS Documents

IRS Revenue Rulings, Revenue Procedures, and Notices cited in this document are published in the Internal Revenue Bulletin (or Cumulative Bulletin) and are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or by visiting the IRS Web site at www.irs.gov.

Special Analyses

Certain IRS regulations, including this one, are exempt from the requirements of Executive Order 12866, as supplemented and reaffirmed by Executive Order 13563. Therefore, a regulatory assessment is not required. The regulations do not impose a collection of information on small entities, therefore the Regulatory Flexibility Act (5 U.S.C. chapter 6) does not apply. Pursuant to section 7805(f) of the Internal Revenue Code, this notice of proposed rulemaking will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on their impact on small business.

Comments and Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any comments that are submitted timely to Treasury and the IRS as prescribed in this preamble in the **ADDRESSES** section.

Treasury and the IRS request comments on all aspects of these proposed regulations. All comments will be available for public inspection and copying at www.regulations.gov or upon request.

A public hearing on these proposed regulations has been scheduled for April 13, 2017 beginning at 10 a.m. in the Auditorium, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC 20224. Due to building security procedures, visitors must enter at the Constitution Avenue entrance. In addition, all visitors must present photo identification to enter the building. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 30 minutes before the hearing starts. For information about having your name placed on the building access list to attend the hearing, see the **FOR FURTHER INFORMATION CONTACT** section of this preamble.

The rules of 26 CFR 601.601(a)(3) apply to the hearing. Persons who wish to present oral comments at the hearing must submit written or electronic comments by March 29, 2017, and an outline of topics to be discussed and the amount of time to be devoted to each topic by March 29, 2017. A period of 10 minutes will be allotted to each person for making comments. An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the hearing.

Drafting Information

The principal authors of these regulations are Thomas Morgan and Linda S. F. Marshall of Office of Associate Chief Counsel (Tax Exempt and Government Entities). However, other personnel from Treasury and the IRS participated in the development of these regulations.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows:

PART 1—INCOME TAXES

■ **Paragraph 1.** The authority citation for part 1 continues to read, in part, as follows:

Authority: 26 U.S.C. 7805 * * *

■ **Par. 2.** Section 1.430(h)(3)–1 is revised to read as follows:

§ 1.430(h)(3)–1 Mortality tables used to determine present value.

(a) *Basis for mortality tables*—(1) *In general.* This section sets forth rules for the mortality tables to be used in determining present value or making any computation under section 430. Generally applicable mortality tables for participants and beneficiaries are set forth in this section pursuant to section 430(h)(3)(A). In general, either the generational mortality tables set forth in paragraph (a)(2) of this section or the static mortality tables set forth in paragraph (a)(3) of this section must be used for a plan. In lieu of using the mortality tables provided under this section with respect to participants and beneficiaries, plan-specific substitute mortality tables are permitted to be used for this purpose pursuant to section 430(h)(3)(C), provided that the requirements of § 1.430(h)(3)–2 are satisfied. Mortality tables that may be used with respect to disabled individuals are to be provided in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

(2) *Generational mortality tables*—(i) *In general*—(A) *Use of generational mortality tables.* The generational mortality tables that are permitted to be used under section 430(h)(3)(A) and paragraph (a)(1) of this section are determined using the base mortality tables described in paragraph (a)(2)(i)(B) of this section and the mortality improvement rates described in paragraph (a)(2)(i)(C) of this section.

(B) *Base mortality tables.* The base mortality tables are set forth in paragraph (d) of this section. The base year for those tables is 2006.

(C) *Mortality improvement rates.* The mortality improvement rates for valuation dates occurring during 2018 are the mortality improvement rates contained in the Mortality Improvement Scale MP–2016 Report (issued by the Retirement Plans Experience Committee (RPEC) of the Society of Actuaries and available at www.soa.org/Research/

Experience-Study/Pension/research-2016-mp.aspx). For later years, updated mortality improvement rates that take into account new data for mortality improvement trends of the general population are to be provided in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

(D) *Application of mortality improvement rates.* Under the generational mortality tables described in this paragraph (a)(2), the probability of an individual's death at a particular age in the future is determined as the individual's base mortality rate that applies at that age (that is, the applicable mortality rate from the table set forth in paragraph (d) of this section for that age, gender, and status as an annuitant or a nonannuitant) multiplied by the cumulative mortality improvement factor for the individual's gender and for that age for the period from 2006 through the calendar year in which the individual is projected to reach the particular age. Paragraph (a)(2)(ii) of this section shows how the base mortality tables in paragraph (d) of this section and the mortality improvement rates for valuation dates occurring during 2018 are combined to determine projected mortality rates.

(E) *Cumulative mortality improvement factor.* The cumulative mortality improvement factor for an age and gender for a period is the product of the annual mortality improvement factors for that age and gender for each year within that period.

(F) *Annual mortality improvement factor.* The annual mortality improvement factor for an age and gender for a year is 1 minus the mortality improvement rate that applies for that age and gender for that year.

(ii) *Example of calculation*—(A) *Calculation of mortality rate.* The mortality rate for 2018 that is applied to male annuitants who are age 66 in 2018 is equal to the product of the mortality rate for 2006 that applied to male annuitants who were age 66 in 2006 (0.013855) and the cumulative mortality improvement factor for age 66 males from 2006 to 2018. The cumulative mortality improvement factor for age 66 males for the period from 2006 to 2018 is 0.8929, and the mortality rate for 2018 for male annuitants who are age 66 in that year would be 0.012371, as shown in the following table.

Calendar year	Scale MP–2016 mortality improvement rate	Annual mortality improvement factor (1-scale MP–2016 rate)	Cumulative mortality improvement factor	Mortality rate
2006	n/a	n/a	n/a	0.013855
2007	0.0237	0.9763	0.9763	
2008	0.0211	0.9789	0.9557	
2009	0.0180	0.9820	0.9385	
2010	0.0142	0.9858	0.9252	
2011	0.0099	0.9901	0.9160	
2012	0.0053	0.9947	0.9112	
2013	0.0043	0.9957	0.9072	
2014	0.0035	0.9965	0.9041	
2015	0.0030	0.9970	0.9014	
2016	0.0028	0.9972	0.8988	
2017	0.0030	0.9970	0.8961	
2018	0.0036	0.9964	0.8929	

(B) *Probability of survival for an individual.* After the projected mortality rates are derived for each age for each year, the rates are used to calculate the present value of a benefit stream that depends on the probability of survival year-by-year. For example, for purposes of calculating the present value (for a 2018 valuation date) of future payments in a benefit stream payable for a male annuitant who is age 66 in 2018, the probability of survival for the annuitant is based on the mortality rate for a male annuitant who is age 66 in 2018 (0.012371), and the projected mortality rate for a male annuitant who will be age 67 in 2019 (0.013302), age 68 in 2020 (0.014321), and so on.

(3) *Static mortality tables.* The static mortality tables that are permitted to be used under section 430(h)(3)(A) and paragraph (a)(1) of this section are updated annually by the IRS according to the methodology described in paragraph (c)(2) of this section. Paragraph (e) of this section sets forth static tables that are permitted to be used for valuation dates in 2018. For valuation dates in later years, static mortality tables are to be provided in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

(b) *Use of the tables—(1) Separate tables for annuitants and nonannuitants—(i) In general.* Separate tables are provided for use for annuitants and nonannuitants. The nonannuitant mortality table is applied to determine the probability of survival for a nonannuitant for the period before the nonannuitant is projected to commence receiving benefits. The annuitant mortality table is applied to determine the present value of benefits for each annuitant. In addition, the annuitant mortality table is applied for each nonannuitant with respect to each assumed commencement of benefits for

the period beginning with that assumed commencement. For purposes of this section, an annuitant means a plan participant who has commenced receiving benefits and a nonannuitant means a plan participant who has not yet commenced receiving benefits (for example, an active employee or a terminated vested participant). A participant whose benefit has partially commenced is treated as an annuitant with respect to the portion of the benefit that has commenced and treated as a nonannuitant with respect to the balance of the benefit. In addition, with respect to a beneficiary of a participant, the annuitant mortality table applies for the period beginning with each assumed commencement of benefits for the participant. If the participant has died (or to the extent the participant is assumed to die before commencing benefits), the annuitant mortality table applies with respect to the beneficiary for the period beginning with each assumed commencement of benefits for the beneficiary.

(ii) *Examples of calculation using separate annuitant and nonannuitant tables.* With respect to a 45-year-old active participant who is projected to commence receiving an annuity at age 55, the funding target is determined using the nonannuitant mortality table for the period before the participant attains age 55 (so that, if the static mortality tables are used pursuant to paragraph (a)(3) of this section, the probability of an active male participant living from age 45 to age 55 using the table that applies for a valuation date in 2018 is 0.988857) and using the annuitant mortality table for the period ages 55 and above. Similarly, for a 45-year-old terminated vested participant who is projected to commence an annuity at age 65, the funding target is determined using the nonannuitant mortality table for the period before the

participant attains age 65 and using the annuitant mortality table for ages 65 and above.

(2) *Small plan tables.* If static mortality tables are used pursuant to paragraph (a)(3) of this section, as an alternative to the separate static tables specified for annuitants and nonannuitants pursuant to paragraph (b)(1) of this section, combined static tables that apply the same mortality rates to both annuitants and nonannuitants are permitted to be used for a small plan. For this purpose, a small plan is defined as a plan with 500 or fewer total participants (including both active and inactive participants and beneficiaries of deceased participants) on the valuation date. The combined static tables that are permitted to be used for small plans pursuant to this paragraph (b)(2) are constructed from the separate nonannuitant and annuitant static mortality tables using the weighting factors for small plans that are set forth in paragraph (d) of this section. The weighting factors are applied to develop these combined static tables using the following equation: Combined mortality rate = [nonannuitant rate * (1- weighting factor)] + [annuitant rate * weighting factor].

(c) *Static tables—(1) Source of rates.* The static mortality tables that are used pursuant to paragraph (a)(3) of this section are determined using the base mortality tables described in paragraph (a)(2)(i)(B) of this section taking into account the mortality improvement rates described in paragraph (a)(2)(i)(C) of this section, in accordance with the rules set forth in paragraph (c)(3) of this section.

(2) *Selection of static tables.* The static mortality tables that are used for a valuation date are the static mortality tables for the calendar year that contains the valuation date.

(3) *Projection of mortality improvements*—(i) *General rule.* Except as provided in paragraph (c)(3)(iii) of this section, the static mortality tables for a calendar year are determined by multiplying the applicable mortality rate for each age from the base mortality tables by both—

(A) The cumulative mortality improvement factor (determined under the rules of paragraph (a)(2) of this section) for the period from 2006 through that calendar year; and

(B) The cumulative mortality improvement factor (determined under the rules of paragraph (a)(2) of this section) for the period beginning in that calendar year and continuing beyond that calendar year for the number of years in the projection period described in paragraph (c)(3)(ii) of this section.

(ii) *Projection period for static mortality tables*—(A) *In general.* The projection period is 8 years for males and 9 years for females, as adjusted

based on age as provided in paragraph (c)(3)(ii)(B) of this section.

(B) *Age adjustment.* For ages below 80, the projection period is increased by 1 year for each year below age 80. For ages above 80, the projection period is reduced (but not below zero) by 1/3 year for each year above 80.

(iii) *Fractional projection periods.* If for an age the number of years in the projection period determined under this paragraph (c)(3) is not a whole number, then the mortality rate for that age is determined by using linear interpolation between—

(A) The mortality rate for that age that would be determined under paragraph (c)(3)(i) of this section if the number of years in the projection period were the next lower whole number; and

(B) The mortality rate for that age that would be determined under paragraph (c)(3)(i) of this section if the number of years in the projection period were the next higher whole number.

(iv) *Example.* For example, at age 85 the projection period for a male is 6 2/3

years (8 years minus 1/3 year for each of the 5 years above age 80). For a valuation date in 2018, the mortality rate in the static mortality table for an 85-year-old male is based on a projection of mortality improvement for 6 2/3 years beyond 2018. Under paragraph (c)(3)(iii) of this section, the mortality rate for an 85-year-old male annuitant in the static mortality table for 2018 is 2/3 times the projected mortality rate for a male annuitant that age in 2024 plus 1/3 times the projected mortality rate for a male annuitant that age in 2025. Accordingly, the mortality rate for an 85-year-old male annuitant in the static mortality table for 2018 is 0.075196 (2/3 times the projected mortality rate for an 85-year old male annuitant in 2024 (0.075447) plus 1/3 times the projected mortality rate for an 85-year old male annuitant in 2025 (0.074693)).

(d) *Base mortality tables.* The following are the base mortality tables. The base year for these tables is 2006.

Age	Males			Females		
	Non-annuitant	Annuitant	Weighting factor for small plans	Non-annuitant	Annuitant	Weighting factor for small plans
0	0.008878	0.008878	0	0.007278	0.007278	0
1	0.000515	0.000515	0	0.000451	0.000451	0
2	0.000348	0.000348	0	0.000295	0.000295	0
3	0.000289	0.000289	0	0.000220	0.000220	0
4	0.000225	0.000225	0	0.000165	0.000165	0
5	0.000197	0.000197	0	0.000149	0.000149	0
6	0.000177	0.000177	0	0.000137	0.000137	0
7	0.000156	0.000156	0	0.000127	0.000127	0
8	0.000132	0.000132	0	0.000117	0.000117	0
9	0.000107	0.000107	0	0.000109	0.000109	0
10	0.000090	0.000090	0	0.000102	0.000102	0
11	0.000095	0.000095	0	0.000105	0.000105	0
12	0.000142	0.000142	0	0.000121	0.000121	0
13	0.000187	0.000187	0	0.000137	0.000137	0
14	0.000230	0.000230	0	0.000151	0.000151	0
15	0.000274	0.000274	0	0.000165	0.000165	0
16	0.000318	0.000318	0	0.000177	0.000177	0
17	0.000364	0.000364	0	0.000187	0.000187	0
18	0.000412	0.000412	0	0.000196	0.000196	0
19	0.000463	0.000463	0	0.000202	0.000202	0
20	0.000510	0.000510	0	0.000202	0.000202	0
21	0.000552	0.000552	0	0.000197	0.000197	0
22	0.000587	0.000587	0	0.000191	0.000191	0
23	0.000599	0.000599	0	0.000190	0.000190	0
24	0.000594	0.000594	0	0.000188	0.000188	0
25	0.000545	0.000545	0	0.000186	0.000186	0
26	0.000510	0.000510	0	0.000186	0.000186	0
27	0.000486	0.000486	0	0.000188	0.000188	0
28	0.000472	0.000472	0	0.000192	0.000192	0
29	0.000468	0.000468	0	0.000198	0.000198	0
30	0.000470	0.000470	0	0.000209	0.000209	0
31	0.000480	0.000480	0	0.000222	0.000222	0
32	0.000495	0.000495	0	0.000238	0.000238	0
33	0.000514	0.000514	0	0.000257	0.000257	0
34	0.000534	0.000534	0	0.000278	0.000278	0
35	0.000557	0.000557	0	0.000301	0.000301	0
36	0.000581	0.000581	0	0.000325	0.000325	0
37	0.000611	0.000611	0	0.000355	0.000355	0
38	0.000648	0.000648	0	0.000389	0.000389	0
39	0.000694	0.000694	0	0.000428	0.000428	0
40	0.000750	0.000750	0	0.000471	0.000471	0

Age	Males			Females		
	Non-annuitant	Annuitant	Weighting factor for small plans	Non-annuitant	Annuitant	Weighting factor for small plans
41	0.000814	0.000823	.0045	0.000518	0.000515	0
42	0.000890	0.000969	.0091	0.000570	0.000603	0
43	0.000982	0.001188	.0136	0.000628	0.000735	0
44	0.001088	0.001480	.0181	0.000691	0.000911	0
45	0.001207	0.001846	.0226	0.000758	0.001131	.0084
46	0.001342	0.002285	.0272	0.000831	0.001395	.0167
47	0.001487	0.002797	.0317	0.000908	0.001703	.0251
48	0.001643	0.003382	.0362	0.000986	0.002055	.0335
49	0.001807	0.004040	.0407	0.001065	0.002451	.0419
50	0.001979	0.004771	.0453	0.001151	0.002891	.0502
51	0.002159	0.005059	.0498	0.001242	0.002993	.0586
52	0.002351	0.005343	.0686	0.001344	0.003124	.0744
53	0.002539	0.005592	.0953	0.001458	0.003291	.0947
54	0.002741	0.005839	.1288	0.001588	0.003499	.1189
55	0.002967	0.006102	.2066	0.001735	0.003755	.1897
56	0.003231	0.006399	.3173	0.001902	0.004065	.2857
57	0.003548	0.006746	.3780	0.002091	0.004435	.3403
58	0.003932	0.007155	.4401	0.002302	0.004869	.3878
59	0.004396	0.007639	.4986	0.002537	0.005373	.4360
60	0.004954	0.008211	.5633	0.002795	0.005942	.4954
61	0.005616	0.008878	.6338	0.003080	0.006581	.5805
62	0.006392	0.009646	.7103	0.003388	0.007283	.6598
63	0.007291	0.010523	.7902	0.003724	0.008043	.7520
64	0.008320	0.011514	.8355	0.004089	0.008870	.8043
65	0.009486	0.012621	.8832	0.004482	0.009760	.8552
66	0.010668	0.013855	.9321	0.005004	0.010731	.9118
67	0.011973	0.015221	.9510	0.005575	0.011790	.9367
68	0.013414	0.016736	.9639	0.006205	0.012952	.9523
69	0.015006	0.018421	.9714	0.006898	0.014226	.9627
70	0.016761	0.020288	.9740	0.007662	0.015628	.9661
71	0.018690	0.022348	.9766	0.008507	0.017170	.9695
72	0.020824	0.024638	.9792	0.009438	0.018861	.9729
73	0.023176	0.027176	.9818	0.010470	0.020723	.9763
74	0.025770	0.029992	.9844	0.011615	0.022780	.9797
75	0.028623	0.033113	.9870	0.012887	0.025057	.9830
76	0.031761	0.036585	.9896	0.014301	0.027590	.9864
77	0.035214	0.040457	.9922	0.015885	0.030438	.9898
78	0.039007	0.044778	.9948	0.017656	0.033653	.9932
79	0.043169	0.049605	.9974	0.019639	0.037296	.9966
80	0.047750	0.055022	1.0	0.021859	0.041440	1.0
81	0.049804	0.061087	1.0	0.023791	0.046181	1.0
82	0.053911	0.067902	1.0	0.027655	0.051564	1.0
83	0.060072	0.075550	1.0	0.033451	0.057714	1.0
84	0.068286	0.084162	1.0	0.041179	0.064709	1.0
85	0.078554	0.093775	1.0	0.050838	0.072601	1.0
86	0.090876	0.104507	1.0	0.062429	0.081490	1.0
87	0.105251	0.116487	1.0	0.075952	0.091444	1.0
88	0.121680	0.129770	1.0	0.091407	0.102470	1.0
89	0.140162	0.144470	1.0	0.108794	0.114635	1.0
90	0.160698	0.160698	1.0	0.128113	0.128113	1.0
91	0.177741	0.177741	1.0	0.142619	0.142619	1.0
92	0.195154	0.195154	1.0	0.157939	0.157939	1.0
93	0.212642	0.212642	1.0	0.173886	0.173886	1.0
94	0.230055	0.230055	1.0	0.190319	0.190319	1.0
95	0.247257	0.247257	1.0	0.207191	0.207191	1.0
96	0.265940	0.265940	1.0	0.225057	0.225057	1.0
97	0.284940	0.284940	1.0	0.243507	0.243507	1.0
98	0.304432	0.304432	1.0	0.262587	0.262587	1.0
99	0.324272	0.324272	1.0	0.282171	0.282171	1.0
100	0.344364	0.344364	1.0	0.302162	0.302162	1.0
101	0.364420	0.364420	1.0	0.322282	0.322282	1.0
102	0.384058	0.384058	1.0	0.342371	0.342371	1.0
103	0.403188	0.403188	1.0	0.362210	0.362210	1.0
104	0.421533	0.421533	1.0	0.381534	0.381534	1.0
105	0.438903	0.438903	1.0	0.400321	0.400321	1.0
106	0.455492	0.455492	1.0	0.418418	0.418418	1.0
107	0.470810	0.470810	1.0	0.435390	0.435390	1.0
108	0.484965	0.484965	1.0	0.451459	0.451459	1.0
109	0.498023	0.498023	1.0	0.466408	0.466408	1.0
110	0.509768	0.509768	1.0	0.480123	0.480123	1.0
111	0.512472	0.512472	1.0	0.492664	0.492664	1.0

Age	Males			Females		
	Non-annuitant	Annuitant	Weighting factor for small plans	Non-annuitant	Annuitant	Weighting factor for small plans
112	0.509296	0.509296	1.0	0.503970	0.503970	1.0
113	0.506193	0.506193	1.0	0.507361	0.507361	1.0
114	0.503061	0.503061	1.0	0.503564	0.503564	1.0
115	0.500000	0.500000	1.0	0.500000	0.500000	1.0
116	0.500000	0.500000	1.0	0.500000	0.500000	1.0
117	0.500000	0.500000	1.0	0.500000	0.500000	1.0
118	0.500000	0.500000	1.0	0.500000	0.500000	1.0
119	0.500000	0.500000	1.0	0.500000	0.500000	1.0
120	1.000000	1.000000	1.0	1.000000	1.000000	1.0

(e) *Static tables for 2018.* The following static mortality tables are used pursuant to paragraph (a)(3) of this section for determining present value or making any computation under section 430 with respect to valuation dates occurring during 2018.

Age	Males			Females		
	Non-annuitant	Annuitant	Optional combined table for small plans	Non-annuitant	Annuitant	Optional combined table for small plans
0	0.002420	0.002420	0.002420	0.002234	0.002234	0.002234
1	0.000142	0.000142	0.000142	0.000140	0.000140	0.000140
2	0.000097	0.000097	0.000097	0.000092	0.000092	0.000092
3	0.000081	0.000081	0.000081	0.000070	0.000070	0.000070
4	0.000064	0.000064	0.000064	0.000053	0.000053	0.000053
5	0.000056	0.000056	0.000056	0.000048	0.000048	0.000048
6	0.000051	0.000051	0.000051	0.000045	0.000045	0.000045
7	0.000046	0.000046	0.000046	0.000042	0.000042	0.000042
8	0.000039	0.000039	0.000039	0.000039	0.000039	0.000039
9	0.000032	0.000032	0.000032	0.000037	0.000037	0.000037
10	0.000027	0.000027	0.000027	0.000035	0.000035	0.000035
11	0.000029	0.000029	0.000029	0.000036	0.000036	0.000036
12	0.000044	0.000044	0.000044	0.000042	0.000042	0.000042
13	0.000058	0.000058	0.000058	0.000048	0.000048	0.000048
14	0.000072	0.000072	0.000072	0.000053	0.000053	0.000053
15	0.000087	0.000087	0.000087	0.000059	0.000059	0.000059
16	0.000102	0.000102	0.000102	0.000064	0.000064	0.000064
17	0.000118	0.000118	0.000118	0.000068	0.000068	0.000068
18	0.000135	0.000135	0.000135	0.000072	0.000072	0.000072
19	0.000153	0.000153	0.000153	0.000075	0.000075	0.000075
20	0.000170	0.000170	0.000170	0.000076	0.000076	0.000076
21	0.000192	0.000192	0.000192	0.000078	0.000078	0.000078
22	0.000214	0.000214	0.000214	0.000080	0.000080	0.000080
23	0.000229	0.000229	0.000229	0.000084	0.000084	0.000084
24	0.000238	0.000238	0.000238	0.000087	0.000087	0.000087
25	0.000230	0.000230	0.000230	0.000090	0.000090	0.000090
26	0.000226	0.000226	0.000226	0.000094	0.000094	0.000094
27	0.000226	0.000226	0.000226	0.000099	0.000099	0.000099
28	0.000230	0.000230	0.000230	0.000105	0.000105	0.000105
29	0.000238	0.000238	0.000238	0.000111	0.000111	0.000111
30	0.000249	0.000249	0.000249	0.000120	0.000120	0.000120
31	0.000263	0.000263	0.000263	0.000130	0.000130	0.000130
32	0.000278	0.000278	0.000278	0.000142	0.000142	0.000142
33	0.000294	0.000294	0.000294	0.000155	0.000155	0.000155
34	0.000309	0.000309	0.000309	0.000168	0.000168	0.000168
35	0.000323	0.000323	0.000323	0.000182	0.000182	0.000182
36	0.000336	0.000336	0.000336	0.000196	0.000196	0.000196
37	0.000350	0.000350	0.000350	0.000213	0.000213	0.000213
38	0.000366	0.000366	0.000366	0.000231	0.000231	0.000231
39	0.000385	0.000385	0.000385	0.000251	0.000251	0.000251
40	0.000410	0.000410	0.000410	0.000273	0.000273	0.000273
41	0.000438	0.000443	0.000438	0.000298	0.000296	0.000298
42	0.000474	0.000516	0.000474	0.000326	0.000344	0.000326
43	0.000518	0.000627	0.000519	0.000358	0.000419	0.000358
44	0.000573	0.000779	0.000577	0.000395	0.000520	0.000395
45	0.000636	0.000973	0.000644	0.000436	0.000651	0.000438
46	0.000712	0.001213	0.000726	0.000484	0.000813	0.000489
47	0.000798	0.001502	0.000820	0.000538	0.001010	0.000550
48	0.000896	0.001844	0.000930	0.000597	0.001245	0.000619
49	0.001005	0.002248	0.001056	0.000661	0.001522	0.000697
50	0.001128	0.002719	0.001200	0.000734	0.001844	0.000790

■ **Par. 3.** Section 1.430(h)(3)–2 is revised to read as follows:

§ 1.430(h)(3)–2 Plan-specific substitute mortality tables used to determine present value.

(a) *In general.* This section sets forth rules for the use of substitute mortality tables under section 430(h)(3)(C) in determining any present value or making any computation under section 430 in accordance with § 1.430(h)(3)–1(a)(1). In order to use substitute mortality tables, a plan sponsor must obtain approval to use substitute mortality tables for the plan in accordance with the procedures set forth in paragraph (b) of this section. Paragraph (c) of this section sets forth rules for the development of substitute mortality tables, including guidelines providing that a plan must have either full or partial credibility in order to have sufficient credible mortality information to use substitute mortality tables. Paragraph (d) of this section describes the requirements for full credibility. Paragraph (e) of this section describes the requirements for partial credibility. Paragraph (f) of this section provides special rules for newly affiliated plans not using substitute mortality tables. Paragraph (g) of this section specifies the effective date and applicability date of this section. The Commissioner may, in revenue rulings and procedures, notices or other guidance published in the Internal Revenue Bulletin (see § 601.601(d)(2)(ii)(b) of this chapter), provide additional guidance regarding approval and use of substitute mortality tables under section 430(h)(3)(C) and related matters.

(b) *Procedures for obtaining approval to use substitute mortality tables—(1) Written request to use substitute mortality tables—(i) General requirements.* In order to use substitute mortality tables, a plan sponsor must submit a written request to the Commissioner that demonstrates that those substitute mortality tables meet the requirements of section 430(h)(3)(C) and this section. This request must specify the first plan year and the term of years (not more than 10) for which the tables are to apply.

(ii) *Time for written request.* Substitute mortality tables may not be used for a plan year unless the plan sponsor submits the written request described in paragraph (b)(1)(i) of this section at least 7 months prior to the first day of the first plan year for which the substitute mortality tables are to apply.

(2) *Commissioner's review of request—(i) In general.* During the 180-

day period that begins on the date the plan sponsor submits a request to use substitute mortality tables for a plan pursuant to this section, the Commissioner will determine whether the request to use substitute mortality tables satisfies the requirements of this section (including any published guidance issued pursuant to paragraph (a) of this section), and will either approve or deny the request. The Commissioner will deny a request if the request fails to meet the requirements of this section or if the Commissioner determines that a substitute mortality table does not sufficiently reflect the mortality experience of the applicable plan population.

(ii) *Request for additional information.* The Commissioner may request additional information with respect to the submission. Failure to provide that information on a timely basis constitutes grounds for denial of the request.

(iii) *Deemed approval.* Except as provided in paragraph (b)(2)(iv) of this section, if the Commissioner does not issue a denial within the 180-day review period, the request is deemed to have been approved.

(iv) *Extension of time permitted.* The Commissioner and a plan sponsor may, before the expiration of the 180-day review period, agree in writing to extend that period, provided that any such agreement also specifies any revisions in the plan sponsor's request, including any change in the requested term of use of the substitute mortality tables.

(c) *Development of substitute mortality tables—(1) Substitute mortality tables must be used for all plans in controlled group—(i) General rule.* Except as otherwise provided in this paragraph (c), substitute mortality tables are permitted to be used for a plan for a plan year only if, for that plan year (or any portion of that plan year), substitute mortality tables are also approved and used for each other pension plan subject to the requirements of section 430 that is maintained by the plan sponsor and by each member of the plan sponsor's controlled group. For purposes of this section, the term controlled group means any group treated as a single employer under paragraph (b), (c), (m), or (o) of section 414.

(ii) *Treatment of plans without credible mortality information.* The rule of paragraph (c)(1)(i) of this section does not prohibit use of substitute mortality tables for one plan for a plan year if the only other plan or plans maintained by the plan sponsor (or by a member of the plan sponsor's controlled group) for

which substitute mortality tables are not used are too small to have fully or partially credible mortality information for the plan year. For purposes of demonstrating that neither males nor females under a plan have credible mortality information for a plan year, the length of the experience study period must be the same length as the longest experience study period used for any plan within the controlled group.

(2) *Mortality experience requirements—(i) In general.* Substitute mortality tables must reflect the actual mortality experience of the pension plan for which the tables are to be used and that mortality experience must be credible mortality information as described in paragraph (c)(2)(ii) of this section. Separate mortality tables must be established for each gender under the plan, and a substitute mortality table is permitted to be established for a gender only if the plan has credible mortality information with respect to that gender. See paragraph (d)(5) of this section for rules permitting the use of substitute mortality tables for populations within a gender that have full credibility.

(ii) *Credible mortality information—(A) In general.* There is credible mortality information for a gender within a plan if and only if the mortality experience with respect to that gender satisfies the requirement for either—

(1) Full credibility (as described in paragraph (d) of this section); or

(2) Partial credibility (as described in paragraph (e) of this section).

(B) *Simplified rule.* Whether there is credible mortality information for a gender may be determined by only taking into account people who are at least age 50 and less than age 100. If there is credible mortality information for a gender when applying this simplified rule, the entire gender (not just those who are at least age 50 and less than age 100) has credible mortality information.

(iii) *Gender without credible mortality information—(A) In general.* If for a plan, one gender has credible mortality information but for a plan year the other gender does not have credible mortality information, then the substitute mortality tables are established for the gender that does have credible mortality information and the mortality tables under § 1.430(h)(3)–1 are used for the gender that does not have credible mortality information.

(B) *Demonstration of lack of credible mortality information for a gender.* In general, in order to demonstrate that a gender within a plan does not have credible mortality information for a plan year, the demonstration that the gender within the plan has fewer than the

minimum number of actual deaths to have partial credibility, as described in paragraph (e)(1) of this section, must be made by analyzing the actual number of deaths over a period that is the same length as the period for the experience study on which the substitute mortality tables are based and that ends less than three years before the first day of the plan year.

(3) *Determination of substitute mortality tables*—(i) *Requirement to use generational mortality table.* A plan's substitute mortality tables must be generational mortality tables. A plan's substitute mortality tables are determined using the plan's base substitute mortality tables developed pursuant to paragraph (d) or (e) of this section and the mortality improvement factors described in paragraph (c)(3)(ii) of this section.

(ii) *Determination of mortality improvement factors.* The mortality improvement factor for an age and a gender is the cumulative mortality improvement factor determined under § 1.430(h)(3)–1(a)(2)(i)(E) for the applicable period. The applicable period is the period beginning with the base year of the base substitute mortality table determined under paragraph (d) or (e) of this section and ending in the calendar year in which the individual attains the age for which the probability of death is being determined. The base year for the base substitute mortality table is the calendar year that contains the day before the midpoint of the experience study period.

(4) *Disabled individuals.* Under section 430(h)(3)(D), separate mortality tables are permitted to be used for certain disabled individuals. If such separate mortality tables are used for those disabled individuals, then those individuals are disregarded for all purposes under this section. Thus, if the mortality tables under section 430(h)(3)(D) are used for disabled individuals under a plan, mortality experience with respect to those individuals must be excluded in developing mortality rates for substitute mortality tables under this section.

(5) *Aggregation*—(i) *Permissive aggregation of plans.* A plan sponsor may use a set of substitute mortality tables for two or more its plans provided that the rules of this section are applied by treating those plans as a single plan. In such a case, the substitute mortality tables must be used for the aggregated plans and must be based on data collected with respect to those aggregated plans.

(ii) *Required aggregation of plans.* In general, plans are not required to be aggregated for purposes of applying the

rules of this section. However, for purposes of this section, a plan is required to be aggregated with any plan that was previously spun off from that plan if a purpose of the spinoff is to avoid the use of substitute mortality tables for any of the plans that were involved in the spinoff.

(6) *Duration of use of tables*—(i) *General rule.* Except as provided in this paragraph (c)(6), substitute mortality tables are used for a plan for the term of consecutive plan years specified in the plan sponsor's written request to use such tables under paragraph (b)(1) of this section and approved by the Commissioner, or a shorter period prescribed by the Commissioner in the approval to use substitute mortality tables. Following the end of the approved term of use, or following any early termination of use described in this paragraph (c)(6), the mortality tables specified in § 1.430(h)(3)–1 are used for the plan unless approval under paragraph (b)(1) of this section has been received by the plan sponsor to use substitute mortality tables for a further term.

(ii) *Early termination of use of tables.* A plan's substitute mortality tables must not be used beginning with the earliest of—

(A) For a plan using a substitute mortality table for only one gender because of a lack of credible mortality information with respect to the other gender, the first plan year for which there is credible mortality information with respect to the gender that had lacked credible mortality information (unless an approved substitute mortality table is used for that gender);

(B) The first plan year for which the plan fails to satisfy the requirements of paragraph (c)(1) of this section (regarding use of substitute mortality tables by controlled group members);

(C) The second plan year following the plan year for which there is a significant change in individuals covered by the plan as described in paragraph (c)(6)(iii) of this section;

(D) The first plan year following the plan year for which a substitute mortality table used for a plan population is no longer accurately predictive of future mortality of that population, as determined by the Commissioner or as certified by the plan's actuary to the satisfaction of the Commissioner; or

(E) The date specified in guidance published in the Internal Revenue Bulletin (see § 601.601(d)(2)(ii)(b) of this chapter) in conjunction with a replacement of mortality tables specified under section 430(h)(3)(A) and § 1.430(h)(3)–1 (other than annual

updates to the static mortality tables issued pursuant to § 1.430(h)(3)–1(a)(3) or changes to the mortality improvement rates pursuant to § 1.430(h)(3)–1(a)(2)(i)(C)).

(iii) *Significant change in coverage*—(A) *Change in coverage from time of experience study.* For purposes of applying the rules of paragraph (c)(6)(ii)(C) of this section, a significant change in the individuals covered by a substitute mortality table occurs if there is an increase or decrease in the number of individuals of at least 20 percent compared to the average number of individuals in that population over the years covered by the experience study on which the substitute mortality tables are based. However, a change in coverage is not treated as significant if the plan's actuary certifies in writing to the satisfaction of the Commissioner that the substitute mortality tables used for the plan population continue to be accurately predictive of future mortality of that population (taking into account the effect of the change in the population).

(B) *Change in coverage from time of certification.* For purposes of applying the rules of paragraph (c)(6)(ii)(C) of this section, a significant change in the individuals covered by a substitute mortality table occurs if there is an increase or decrease in the number of individuals covered by a substitute mortality table of at least 20 percent compared to the number of individuals in a plan year for which a certification described in paragraph (c)(6)(iii)(A) of this section was made on account of a prior change in coverage. However, a change in coverage is not treated as significant if the plan's actuary certifies in writing to the satisfaction of the Commissioner that the substitute mortality tables used by the plan with respect to the covered population continue to be accurately predictive of future mortality of that population (taking into account the effect of the change in the plan population).

(d) *Full credibility*—(1) *In general.* The mortality experience with respect to a gender or other population within a plan has full credibility if the actual number of deaths for that population during the experience study period described in paragraph (d)(2) of this section is at least the full credibility threshold described in paragraph (d)(3) of this section. Paragraph (d)(4) of this section provides rules for the creation of a base substitute mortality table from the experience study, which apply if the mortality experience for the population has full credibility.

(2) *Experience study period requirements.* The base substitute

mortality table for a gender or other population within a plan must be developed from an experience study of the mortality experience of that population that is collected over an experience study period. The length of the experience study period must be at least 2 years and no more than 5 years. The last day of the final year reflected in the experience data must be less than 3 years before the first day of the first plan year for which the substitute mortality tables are to apply. For example, if July 1, 2019, is the first day of the first plan year for which the substitute mortality tables will be used, then an experience study using calendar year data must include data collected for a period that ends no earlier than December 31, 2016.

(3) *Full credibility threshold*—(i) *Threshold number of deaths.* The full credibility threshold for a gender or other population within a plan is the product of 1,082 and the population's benefit dispersion factor. In calculating the population's benefit dispersion factor, for purposes of paragraphs (d)(3)(iii), (iv), and (v) of this section, the population is adjusted, as appropriate, for people who leave on account of reason other than death.

(ii) *Population's benefit dispersion factor.* The population's benefit dispersion factor is equal to—

(A) The number of expected deaths for the population during the experience study period (as defined in paragraph (d)(3)(iii) of this section); multiplied by

(B) The mortality-weighted square of the benefits (as defined in paragraph (d)(3)(iv) of this section); divided by

(C) The square of the mortality-weighted benefits (as defined in paragraph (d)(3)(v) of this section).

(iii) *Number of expected deaths.* The number of expected deaths for a population during the experience study period is equal to the sum, for each year in the experience study period, of the expected number of deaths in the population during the year using the mortality rates from the standard mortality tables set forth in paragraph (d)(4)(iii) of this section.

(iv) *Mortality-weighted square of the benefits.* The mortality-weighted square of the benefits for a population is the sum, for each year in the experience study period, for all individuals for each age in the population at the beginning of the year, of the product of—

(A) The probability of death of those individuals using the mortality rate for that age from the standard mortality table set forth in paragraph (d)(4)(iii) of this section; and

(B) The sum of the square of the accrued benefits (substituting the

current periodic payment in the case of individuals in pay status) for those individuals.

(v) *Square of the mortality-weighted benefits.* The square of the mortality-weighted benefits is equal to the square of the sum, for each year in the experience study period, for all individuals for each age in the population at the beginning of the year, of the product of—

(A) The probability of death of those individuals using the mortality rate for that age from the standard mortality table set forth in paragraph (d)(4)(iii) of this section; and

(B) The sum of the accrued benefits (substituting the current periodic payment in the case of individuals in pay status) for those individuals.

(4) *Development of mortality rates*—

(i) *In general.* The mortality rates derived from the experience study must be amounts-weighted mortality rates that are derived by multiplying the mortality rate from the standard mortality table described in paragraph (d)(4)(iii) of this section by the mortality ratio determined under paragraph (d)(4)(ii) of this section. If the simplified rule of paragraph (c)(2)(ii)(B) of this section is used for the population, then the mortality ratio is determined only taking into account people who are at least 50 years old and less than 100 years old, but the mortality ratio is applied to all ages. Because amounts-weighted mortality rates for a plan cannot be determined without benefit amounts, the mortality experience study used to develop a base table must not include periods before the plan was established.

(ii) *Mortality ratio.* The mortality ratio for a gender or other population within a plan is equal to the quotient determined by dividing—

(A) The sum, for each year in the experience study period, of the accrued benefits (substituting the current periodic payment in the case of individuals in pay status) for all individuals in the population at the beginning of the year who died during the year, by

(B) The sum, for each year in the experience study period, for all individuals for each age in the population at the beginning of the year (adjusted, as appropriate, for people who leave on account of reason other than death), of the product of—

(1) The probability of death of those individuals using the mortality rate for that age from the standard mortality table set forth in paragraph (d)(4)(iii) of this section; and

(2) The sum of the accrued benefits (substituting the current periodic

payment in the case of individuals in pay status) for those individuals.

(iii) *Standard mortality table*—(A) *Projection of base table.* The standard mortality table for a year is the mortality table determined by applying cumulative mortality improvement factors determined under § 1.430(h)(3)–1(a)(2)(i)(E) to the base mortality table under § 1.430(h)(3)–1(d) for the period beginning with 2006 and ending in the base year for the base substitute mortality table determined under paragraph (d) or (e) of this section. For purposes of the previous sentence, the cumulative mortality improvement factors are determined using the mortality improvement rates described in § 1.430(h)(3)–1(a)(2)(i)(C) that apply for the calendar year during which the plan sponsor submits the request to use substitute mortality tables. If the plan sponsor submits such a request during 2017, then the cumulative mortality improvement factors are determined using the mortality improvement rates contained in the Mortality Improvement Scale MP–2016 Report (issued by the Retirement Plans Experience Committee (RPEC) of the Society of Actuaries and available at www.soa.org/Research/Experience-Study/Pension/research-2016-mp.aspx).

(B) *Selection of base table.* If the population consists solely of annuitants, the annuitant base mortality table under § 1.430(h)(3)–1(d) must be used for purposes of paragraph (d)(4)(iii)(A) of this section. If the population consists solely of nonannuitants, the nonannuitant base mortality table under § 1.430(h)(3)–1(d) must be used for that purpose. If the population includes both annuitants and non-annuitants, a combination of the annuitant and nonannuitant base tables under § 1.430(h)(3)–1(d) must be used for that purpose. The combined table is constructed using the weighting factors for small plans that are set forth in § 1.430(h)(3)–1(d). The weighting factors are applied to develop the combined table using the following equation: Combined mortality rate = [nonannuitant rate * (1 – weighting factor)] + [annuitant rate * weighting factor].

(iv) *Change in number of individuals covered by table.* Experience data may not be used to develop a base table if the number of individuals in the population covered by the table (for example, the male annuitant population) as of the last day of the plan year before the year the request to use substitute mortality tables is made, compared to the average number of individuals in that population over the years covered by the experience study on which the

substitute mortality tables are based, reflects a difference of 20 percent or more, unless it is demonstrated to the satisfaction of the Commissioner that the experience data is accurately predictive of future mortality of that plan population (taking into account the effect of the change in individuals) after appropriate adjustments to the data are made (for example, excluding data from individuals with respect to a spun-off portion of the plan). For this purpose, a reasonable estimate of the number of individuals in the population covered by the table may be used.

(5) *Separate tables for specified populations*—(i) *In general*. Except as provided in this paragraph (d)(5), separate substitute mortality tables are permitted to be used for separate populations within a gender under a plan only if—

(A) All individuals of that gender in the plan are divided into separate populations;

(B) Each separate population has mortality experience that has full credibility as determined under the rules of paragraph (d)(5)(iii) of this section; and

(C) The separate base substitute mortality table for each separate population is developed applying the rules of paragraphs (d)(1) through (4) of this section using an experience study that takes into account solely members of that population.

(ii) *Annuitant and nonannuitant separate populations*. Notwithstanding paragraph (d)(5)(i)(B) of this section, substitute mortality tables for separate populations of annuitants and nonannuitants within a gender may be used even if only one of those separate populations has credible mortality information. Similarly, if separate populations that satisfy paragraph (d)(5)(i)(B) of this section are established, then any of those populations may be further subdivided into separate annuitant and nonannuitant subpopulations, provided that at least one of the two resulting subpopulations has credible mortality experience. The standard mortality tables under § 1.430(h)(3)–1 are used for a resulting subpopulation that does not have credible mortality information. For example, in the case of a plan with mortality experience for both its male hourly and salaried individuals that has full credibility, if the male salaried annuitant population has credible mortality information, substitute mortality tables may be used for the plan with respect to that population even if the standard mortality tables under § 1.430(h)(3)–1 are used with respect to the male salaried

nonannuitant population (because that nonannuitant population does not have credible mortality information).

(iii) *Credible mortality experience for separate populations*. In determining whether the mortality experience for a separate population within a gender has full credibility, the requirements of paragraph (d)(1) of this section must be satisfied but, in applying that paragraph (d)(1), the separate population should be substituted for the particular gender. In demonstrating that an annuitant or nonannuitant population within a gender or within a separate population does not have credible mortality information, the requirements of paragraph (c)(2)(iii)(B) of this section must be satisfied but, in applying that paragraph, the annuitant (or nonannuitant) population should be substituted for the particular gender.

(e) *Partial credibility*—(1) *In general*. The mortality experience with respect to a population has partial credibility if the actual number of deaths for that population during the experience study period described in paragraph (d)(2) of this section is at least equal to the partial credibility threshold of 100 and is less than the full credibility threshold described for the population in paragraph (d)(3) of this section. If the mortality experience for the population has partial credibility, then in lieu of creating a base substitute mortality table as described in paragraph (d) of this section, the base substitute mortality table is created as the sum of—

(i) The product of—

(A) The partial credibility weighting factor determined under paragraph (e)(2) of this section; and

(B) The mortality rates that are derived from the experience study determined under paragraph (d)(4)(i) of this section, and

(ii) The product of—

(A) One minus the partial credibility weighting factor described in paragraph (e)(2) of this section; and

(B) The mortality rate from the standard mortality tables described in paragraph (d)(4)(iii) of this section.

(2) *Partial credibility weighting factor*. The partial credibility weighting factor is equal to the square root of the fraction—

(i) The numerator of which is the actual number of deaths for the population during the experience study period, and

(ii) The denominator of which is the full credibility threshold for the population described in paragraph (d)(3) of this section.

(f) *Special rules for newly affiliated plans*—(1) *In general*. This paragraph (f) provides special rules that provide

temporary relief from certain rules in this section in the case of a controlled group that includes a newly affiliated plan. Paragraph (f)(2) of this section provides a transition period during which the requirement in paragraph (c)(1) of this section (that is, the requirement that all plans within the controlled group that have credible mortality information must use substitute mortality tables) is not applicable. Paragraph (f)(3) of this section provides special rules that permit the use of a shorter experience study period in the case of a newly affiliated plan that excludes the mortality experience data for the period prior to the date the plan sponsor becomes maintained by a member of the new plan sponsor's controlled group. Paragraph (f)(4) of this section defines *newly affiliated plan*.

(2) *Transition period for newly affiliated plans*. The use of substitute mortality tables for a plan within a controlled group is not prohibited merely because substitute mortality tables are not used during the transition period for a newly affiliated plan that fails to demonstrate a lack of credible mortality information during the that period. Similarly, during the transition period, the use of substitute mortality tables for a newly affiliated plan is not prohibited merely because substitute mortality tables are not used for another plan within the controlled group that fails to demonstrate a lack of credible mortality information during that period. The transition period runs through the last day of the plan year that contains the last day of the period described in section 410(b)(6)(C)(ii) for either of the plans, whichever is later.

(3) *Experience study period for newly affiliated plan*—(i) *In general*. The mortality experience data for a newly affiliated plan may either include or exclude mortality experience data for the period prior to the date the plan becomes maintained by a member of the new plan sponsor's controlled group. If a plan sponsor excludes mortality experience data for the period prior to the date the plan becomes maintained within the new plan sponsor's controlled group, the exclusion must apply for all populations within the plan.

(ii) *Demonstration relating to lack of credible mortality experience*. If the experience study for a newly affiliated plan excludes mortality experience data for the period prior to the date the plan becomes maintained by a member of the new plan sponsor's controlled group, then the demonstration that the plan does not have credible mortality information for a plan year that begins

after the transition period can be made using a shorter experience study period than would otherwise be permitted under paragraph (c)(2)(iii)(B) of this section, provided that the experience study period begins with the date the plan becomes maintained within the sponsor's controlled group and ends not more than one year and one day before the first day of the plan year.

(iii) *Demonstration relating to credible mortality experience.* If the experience study for a newly affiliated plan excludes mortality experience data for the period prior to the date the plan becomes maintained by a member of the new plan sponsor's controlled group and the plan fails to demonstrate that it does not have credible mortality information for the plan year under the rules of paragraph (f)(3)(ii) of this section, then other plans within the controlled group can continue to use substitute mortality tables only if substitute mortality tables are used for the newly affiliated plan the plan year. In such a case, the experience study period can be a shorter period than the period in paragraph (d)(2) of this section, provided that the period is at least one year.

(4) *Definition of newly affiliated plan.* For purposes of this paragraph (f), a plan is treated as a newly affiliated plan if it becomes maintained by the plan sponsor (or by a member of the plan sponsor's controlled group) in connection with a merger, acquisition, or similar transaction described in § 1.410(b)-2(f). A plan also is treated as a newly affiliated plan for purposes of this section if the plan is established in connection with a transfer of assets and liabilities from another employer's plan in connection with a merger, acquisition, or similar transaction described in § 1.410(b)-2(f).

(g) *Effective/applicability date.* This section applies for plan years beginning on or after January 1, 2018, and any substitute mortality table used for a plan for such a plan year must comply with the rules of this section.

■ **Par. 4.** Section 1.431(c)(6)-1 is revised to read as follows:

§ 1.431(c)(6)-1 Mortality tables used to determine current liability.

(a) *Mortality tables used to determine current liability.* The mortality assumptions that apply to a defined benefit plan for the plan year pursuant to section 430(h)(3)(A) and § 1.430(h)(3)-1(a) are used to determine a multiemployer plan's current liability for purposes of applying the rules of section 431(c)(6). Either the generational mortality tables used pursuant to § 1.430(h)(3)-1(a)(2) or the static

mortality tables used pursuant to § 1.430(h)(3)-1(a)(3) are permitted to be used for a multiemployer plan for this purpose. However, for this purpose, substitute mortality tables under § 1.430(h)(3)-2 are not permitted to be used for a multiemployer plan.

(b) *Effective/applicability date.* This section applies for plan years beginning on or after January 1, 2018. For rules that apply to plan years beginning before January 1, 2018 and on or after January 1, 2008, see § 1.431(c)(6)-1 (as contained in 26 CFR part 1 revised April 1, 2015).

■ **Par. 5.** Section 1.433(h)(3)-1 is added to read as follows:

§ 1.433(h)(3)-1 Mortality tables used to determine current liability.

(a) *Mortality tables used to determine current liability.* In accordance with section 433(h)(3)(B), the mortality assumptions that apply to a defined benefit plan for the plan year pursuant to section 430(h)(3)(A) and § 1.430(h)(3)-1(a) are used to determine a CSEC plan's current liability for purposes of applying the rules of section 433(c)(7)(C). Either the static mortality tables used pursuant to § 1.430(h)(3)-1(a)(3) or generational mortality tables used pursuant to § 1.430(h)(3)-1(a)(2) are permitted to be used for a CSEC plan for this purpose, but substitute mortality tables under § 1.430(h)(3)-2 are not permitted to be used for this purpose.

(b) *Effective/applicability date.* This section applies for plan years beginning on or after January 1, 2018.

John Dalrymple,

Deputy Commissioner for Services and Enforcement.

[FR Doc. 2016-30906 Filed 12-28-16; 8:45 am]

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DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG-112800-16]

RIN 1545-BN42

Nuclear Decommissioning Funds

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document provides proposed changes to the regulations under section 468A of the Internal Revenue Code of 1986 (Code) relating to deductions for contributions to trusts maintained for decommissioning nuclear power plants and the use of the

amounts in those trusts to decommission nuclear plants. The proposed regulations revise certain provisions to: Address issues that have arisen as more nuclear plants have begun the decommissioning process; and clarify provisions in the current regulations regarding self-dealing and the definition of substantial completion of decommissioning.

DATES: Written or electronic comments and requests for a public hearing must be received by March 29, 2017.

ADDRESSES: Send submissions to: CC:PA:LPD:PR (REG-112800-16), Room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand delivered Monday through Friday between the hours of 8 a.m. and 4 p.m. to: CC:PA:LPD:PR (REG-112800-16), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC, or sent electronically, via the Federal eRulemaking Portal at <http://www.regulations.gov/> (IRS REG-112800-16).

FOR FURTHER INFORMATION CONTACT: Concerning the regulations, Jennifer C. Bernardini, (202) 317-6853; concerning submissions and to request a hearing, Regina Johnson, (202) 317-6901 (not toll-free numbers).

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act

There is no new collection of information contained in this notice of proposed rulemaking. The collection of information contained in the regulations under section 468A has been reviewed and approved by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) under control number 1545-2091. Responses to these collections of information are required to obtain a tax benefit.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid control number assigned by the Office of Management and Budget.

Books or records relating to a collection of information must be retained as long as their contents may become material in the administration of any internal revenue law. Generally, tax returns and tax return information are confidential, as required by section 6103 of the Code.

Background

This proposed rulemaking consists of several amendments to the existing regulations under section 468A. Section 468A was originally enacted by section