
2019 Instructions for Schedule SB (Form 5500) *Single-Employer Defined Benefit Plan Actuarial Information*

General Instructions

Note. To the extent that regulations and other items of published guidance under Code sections 430 and 436 do not take into account statutory changes since those regulations were issued, plan sponsors must take into account the provisions of the Worker, Retiree, and Employer Recovery Act of 2008 ("WRERA"), Pub. L. No. 110-458, the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 ("PRA 2010"), Pub. L. No. 111-192, Moving Ahead for Progress in the 21st Century Act ("MAP-21"), Pub. L. No. 112-141, the Cooperative and Small Employer Charity Pension Flexibility Act of 2014 ("CSEC Act"), Pub. L. No. 113-97, the Highway and Transportation Funding Act of 2014 (HATFA), Pub. L. No. 113-159, and the Bipartisan Budget Act of 2015 (BBA'15), Pub. L. No. 114-74, and any other amendments to the funding rules that are enacted.

Who Must File

As the first step, the plan administrator of any single-employer defined benefit plan (including a multiple-employer defined benefit plan) that is subject to the minimum funding standards (see Code section 412 and Part 3 of Title I of ERISA) **must** obtain a completed Schedule SB (including attachments) that is prepared and signed by the plan's enrolled actuary as discussed below in the *Statement by Enrolled Actuary* section. The plan administrator must retain with the plan records the Schedule SB that is prepared and signed by the plan's actuary.

Next, the plan administrator must ensure that the information from the actuary's Schedule SB is entered electronically into the annual return/report being submitted. When entering the information, whether using EFAST2-approved software or EFAST2's web-based filing system, all the fields required for the type of plan must be completed (see instructions for fields that need to be completed).

Further, the plan administrator of a single-employer defined benefit plan must attach to the Form 5500 or Form 5500-SF an electronic reproduction of the Schedule SB (including attachments) prepared and signed by the plan's enrolled actuary. This electronic reproduction must be labeled "**SB Actuary Signature**" and must be included as a Portable Document Format (PDF) attachment or any alternative electronic attachment allowable under EFAST2.

Note. The Schedule SB (Form 5500) does not have to be filed with the Form 5500-EZ, but it must be retained (in accordance with the Instructions for Form 5500-EZ under the *What To File* section). Similarly, the Schedule SB does not have to be filed with the Form 5500-SF for a one-participant plan (as defined in the Form 5500-EZ instructions) that is eligible for the Form 5500-SF and elects to file such form instead of the Form 5500-EZ. However, the Schedule SB must be retained in accordance with the Instructions for Form 5500-SF under the section headed *Specific Instructions Only for "One-Participant Plans."* The enrolled actuary must complete and sign the Schedule SB and forward it to the person responsible for filing the Form 5500-EZ or Form 5500-SF, even if the Schedule SB is not filed.

Check the Schedule SB box on the Form 5500 (Part II, line 10a(3)) if a Schedule SB is attached to Form 5500. Check

"Yes" on line 11 in Part VI of the Form 5500-SF if a Schedule SB is required to be prepared for the plan, even if Schedule SB is not required to be attached to Form 5500-SF (see instructions in the Note above, pertaining to "one-participant plans").

Note. This schedule is not filed for a multiemployer plan nor for a money purchase defined contribution plan (including a target benefit plan) for which a waiver of the minimum funding requirements is currently being amortized. Information for these plans must be filed using Schedule MB (Form 5500).

Specific Instructions

Lines A through F. Identifying Information. Lines A – F must be completed for all plans. Lines A through D should include the same information as reported in corresponding lines in Part II of the Form 5500, Form 5500-SF, or Form 5500-EZ filed for the plan. You may abbreviate the plan name (if necessary) to fit in the space provided.

Do not use a social security number in line D instead of an EIN. The Schedule SB and its attachments are open to public inspection if filed with a Form 5500 or Form 5500-SF, and the contents are public information and are generally subject to publication on the Internet. Because of privacy concerns, the inclusion of a social security number or any portion thereof on the Schedule SB or any of its attachments may result in the rejection of the filing.

You can apply for an EIN from the IRS online, by fax, or by mail depending on how soon you need to use the EIN. For more information, see *Section 3: Electronic Filing Requirement* under *General Instructions to Form 5500*. The EBSA does not issue EINs.

Line E. Type of Plan. Check the applicable box to indicate the type of plan. A single-employer plan for this reporting purpose is an employee benefit plan maintained by one employer or one employee organization. A multiple-employer plan is a plan that is maintained by more than one employer, but is not a multiemployer plan. (See the Instructions for Form 5500, box A for additional information on the definition of a multiemployer plan.)

- Check "Single" if the Form 5500, Form 5500-SF, or Form 5500-EZ is filed for a single-employer plan (including a plan maintained by more than one member of the same controlled group).
- Check "Multiple-A" if the Form 5500 or Form 5500-SF is being filed for a multiple-employer plan and the plan is subject to the rules of Code section 413(c)(4)(A) (i.e., it is funded as if each employer were maintaining a separate plan). This includes plans established before January 1, 1989, for which an election was made to fund in accordance with Code section 413(c)(4)(A).
- Check "Multiple-B" if the Form 5500 or Form 5500-SF is being filed for a multiple-employer plan and the plan is subject to the rules of Code section 413(c)(4)(B) (i.e., it is funded as if all participants were employed by a single employer).

If "Multiple-A" is checked, with the exception of Part III, the data entered on Schedule SB should be the sum of the individual amounts computed for each employer. The percentages reported in Part III should be calculated based on the reported aggregate numbers rather than by summing up the individual percentages. The Schedule SB data for each employer's portion of the plan must be submitted as an attachment. This is accomplished by completing and attaching a Schedule SB for each employer or by attaching a document containing that information (e.g., a table showing a row for each Schedule SB data item and a column for each

employer). Label the attachment **“Schedule SB – Information for Each Individual Employer.”**

Line F. Prior Year Plan Size. Check the applicable box based on the highest number of participants (both active and inactive) on any day of the preceding plan year, taking into account participants in all defined benefit plans maintained by the same employer (or any member of such employer’s controlled group) who are or were also employees of that employer or member. For this purpose, participants whose only defined benefit plan is a multiemployer plan (as defined in Code section 414(f)) are not counted, and participants who are covered in more than one of the defined benefit plans described above are counted only once. Inactive participants include vested terminated and retired employees as well as beneficiaries of deceased participants. If this is the first plan year that a plan described in this paragraph exists, complete this line based on the highest number of participants that the plan was reasonably expected to have on any day during the first plan year.

General Instructions, Parts I through IX, Statement by Enrolled Actuary, and Attachments

Except as noted below, Parts I through VIII **must** be completed for all single and multiple-employer defined benefit plans, regardless of size or type. See instructions for line 27 for additional information to be provided for certain plans with special circumstances. Part IX is completed only for those plans for which an alternative amortization schedule was elected under section 430(c)(2)(D) of the Code or section 303(c)(2)(D) of ERISA, as amended by PRA 2010.

PPA provides funding relief for certain defined benefit plans (other than multiemployer plans) maintained by a commercial passenger airline or by an employer whose principal business is providing catering services to a commercial passenger airline, based on an alternative 17-year funding schedule. Plans using this funding relief do not need to complete the entire Schedule SB, but are required to provide supplemental information as an attachment to Schedule SB. See the instructions for line 27 for more information about which lines of Schedule SB need to be completed and what additional attachments are required.

Code section 430(h)(2)(C)(iv) and ERISA section 302(h)(2)(C)(iv) provide that, for certain purposes, each of the three segment rates described in those sections is adjusted as necessary to fall within a specified range that is determined based on an average of the corresponding segment rates for the 25-year period ending on September 30 of the calendar year preceding the first day of the plan year. Accordingly, if the funding target and target normal cost for a plan are determined using the segment rates, the segment rates used to determine the minimum required contribution and the adjusted funding target attainment percentage (“AFTAP”) used to apply funding-based benefit restrictions under Code section 436 and ERISA section 206(g) may be different from those used for other purposes (such as the segment rates used to determine the deductible limit under Code section 404(o)). In such cases, report all information on Schedule SB reflecting the assumptions used to determine the minimum required contribution and the AFTAP used to apply funding-based benefit restrictions.

Note. (1) For a plan funded with insurance (other than a plan described in Code section 412(e)(3) or ERISA section 301(b)), refer to section 1.430(d)-1(c)(2) of the Income Tax Regulations regarding whether to include the liabilities for benefits covered under insurance contracts held by the plan and whether to include the value of the insurance contracts in plan assets.

(2) For terminating plans, Revenue Ruling 79-237, 1979-2 C.B. 190, provides that minimum funding standards apply until the end of the plan year that includes the termination date. Accordingly, the Schedule SB is not required to be filed for any later plan year. However, if a termination fails to occur — whether because assets remain in the plan’s related trust (see Revenue Ruling 89-87, 1989-2 C.B. 81) or for any other reason (e.g., the PBGC issues a notice of noncompliance pursuant to 29 CFR section 4041.31 for a standard termination) — there is no termination date, and therefore, minimum funding standards continue to apply and a Schedule SB continues to be required.

Statement by Enrolled Actuary

An enrolled actuary must sign Schedule SB. The signature of the enrolled actuary may be qualified to state that it is subject to attached qualifications. See Treasury Regulations section 301.6059-1(d) for permitted qualifications. If the actuary has not fully reflected any final or temporary regulation, revenue ruling, or notice promulgated under the statute in completing the Schedule SB, check the box on the last line of page 1. If this box is checked, indicate on an attachment whether any unpaid required contribution or a contribution that is not wholly deductible would result if the actuary had fully reflected such regulation, revenue ruling, or notice, and label this attachment **“Schedule SB – Statement by Enrolled Actuary.”** In addition, the actuary may offer any other comments related to the information contained in Schedule SB. Except as otherwise provided in these instructions, a stamped or machine produced signature is not acceptable.

The actuary must provide the completed and signed Schedule SB to the plan administrator to be retained with the plan records and included (in accordance with these instructions) with the Form 5500 or Form 5500-SF that is submitted under EFAST2. The plan’s actuary is permitted to sign the Schedule SB on page one using the actuary’s signature or by inserting the actuary’s typed name in the signature line followed by the actuary’s handwritten initials. The actuary’s most recent enrollment number must be entered on the Schedule SB that is prepared and signed by the plan’s actuary.

Attachments

All attachments to the Schedule SB must be properly identified as attachments to the Schedule SB, and must include the name of the plan, plan sponsor’s EIN, plan number, and line number to which the schedule relates.

Do not include attachments that contain a visible social security number. Except for certain one-participant plans, the Schedule SB and its attachments are open to public inspection, and the contents are public information and are subject to publication on the Internet. Because of privacy concerns, the inclusion of a visible social security number or any portion thereof on an attachment may result in the rejection of the filing.

Part I – Basic Information

Note. All entries in Part I must be reported as of the valuation date, reflecting the assumptions and amounts generally used to determine the minimum required contribution. In the case of a plan described in section 104 of PPA, the information should be reported as if PPA provisions were effective for all plan years beginning after December 31, 2007.

Line 1. Valuation Date. The valuation date for a plan year must be the first day of the plan year unless the plan meets the small-plan exception of Code section 430(g)(2)(B) and ERISA section 303(g)(2)(B). For plans that qualify for the exception,

the valuation date may be any date in the plan year, including the first or last day of the plan year.

A plan qualifies for this small-plan exception if there were 100 or fewer participants on each day of the prior plan year. For the definition of participant as it applies in this case, see the instructions for line F.

Line 2a. Market Value of Assets. Enter the fair market value of assets as of the valuation date. Include contributions designated for any previous plan year that are made after the valuation date (but within the 8½-month period after the end of the immediately preceding plan year), adjusted for interest for the period between the date of payment and the valuation date as provided in the applicable regulations.

Contributions made for the current plan year must be excluded from the amount reported in line 2a. If these contributions were made prior to the valuation date (which can only occur for small plans with a valuation date other than the first day of the plan year), the asset value must be adjusted to exclude not only the contribution amounts, but interest on the contributions from the date of payment to the valuation date, using the current-year effective interest rate.

Do not adjust for items such as the funding standard carryover balance, prefunding balance, any unpaid minimum required contributions, or the present value of remaining shortfall or waiver amortization installments. Rollover amounts or other assets held in individual accounts that are not available to provide defined benefits under the plan should not be included on line 2a regardless of whether they are reported on the Schedule H (Form 5500) (line 1l, column (a)) or Schedule I (Form 5500) (line 1c, column (a)), or Form 5500-SF (line 7c, column (a)). Additionally, asset and liability amounts must be determined in a consistent manner. Therefore, if the value of any insurance contracts has been excluded from the amount reported in line 2a, liabilities satisfied by such contracts should also be excluded from the funding target values reported in lines 3 and 4.

Line 2b. Actuarial Value of Assets. Do not adjust the actuarial value of assets for items such as the funding standard carryover balance, the prefunding balance, any unpaid minimum required contributions, or the present value of any remaining shortfall or waiver amortization installments. Treat contributions designated for a current or prior plan year, rollover amounts, insurance contracts, and other items in the same manner as for line 2a.

If an averaging method is used to value plan assets (as permitted under Code section 430(g)(3)(B) and ERISA section 303(g)(3)(B), as amended by WREDA), enter the value as of the valuation date taking into account the requirement that such value must be within 90% to 110% of the fair market value of assets.

Note. Under Code section 430(g)(3)(B), the use of averaging methods in determining the value of plan assets is permitted only in accordance with methods prescribed in Treasury regulations. Accordingly, taxpayers cannot use asset valuation methods other than fair market value (as described in Code section 430(g)(3)(A)), except as provided under Notice 2009-22, 2009-14 IRB 741, or Treasury regulations.

Line 3. Funding Target/Participant Count Breakdown. All amounts should be reported as of the valuation date.

- Column (1)—Enter the number of participants in each category (e.g., terminated vested participants). Enter “0” if no participants fall into the category. Include beneficiaries of deceased participants who are or who will be entitled to benefits under the plan.

- Column (2)—Enter the portion of the funding target attributable to vested benefits. If no portion of the funding target for a particular category is attributable to vested benefits, enter “0.” For this purpose, benefits considered to be vested for PBGC premium purposes must be included.

- Column (3)—Enter the funding target attributable to all benefits, both vested and nonvested. Enter “0” if no portion of the funding target is for participants in a particular category. For columns (2) and (3), the funding target must be calculated using the methods and assumptions provided in Code sections 430(h) and (i), ERISA sections 303(h) and (i), and other related guidance.

Unless the plan sponsor has received approval to use substitute mortality tables in accordance with Code section 430(h)(3)(C) and ERISA section 303(h)(3)(C), the funding target must be computed using the mortality tables for non-disabled lives, as described in section 1.430(h)(3)-1 of the regulations. If substitute mortality tables have been approved (or deemed to have been approved) by the IRS, such tables must be used instead of the mortality tables described in the previous sentence, subject to the rules of Code section 430(h)(3) and ERISA section 303(h)(3). The funding target may be computed taking into account the mortality tables for disabled lives published in Revenue Ruling 96-7, 1996-1 C.B. 59, and as provided in Notice 2008-29, 2008-12 IRB 637.

Special rules for plans that are in at-risk status. If a plan is in at-risk status, report the amount reflecting the additional assumptions required in Code section 430(i)(1)(B) and ERISA section 303(i)(1)(B).

If the plan has been in at-risk status for any two or more of the preceding four plan years, also include the loading factor required in Code section 430(i)(1)(C) and ERISA section 303(i)(1)(C). If the plan is in at-risk status and has been in at-risk status for fewer than five consecutive years, report the funding target amounts after reflecting the transition rule provided in Code section 430(i)(5) and ERISA section 303(i)(5). For example, the funding target for a plan that is in at-risk status for 2019 and was in at-risk status for the 2016, 2017 and 2018 plan years (but not the 2015 plan year) will reflect 80% of the funding target using the special at-risk assumptions and 20% of the funding target determined without regard to the at-risk assumptions.

Determining whether a plan is in at-risk status. Refer to Code section 430(i)(4) and ERISA section 303(i)(4) to determine whether the plan is in at-risk status. Generally, a plan is in at-risk status for a plan year if it had more than 500 participants on any day during the preceding plan year (see instructions for line F for the definition of participants) and the plan’s funding target attainment percentage (“FTAP”) for the preceding plan year fell below specified thresholds.

A plan with over 500 participants is in at-risk status for 2019 if both:

- the FTAP for 2018 (line 14 of the 2018 Schedule SB) is less than 80%, and
- the at-risk funding target attainment percentage for 2018 is less than 70%.

In general, the at-risk funding target attainment percentage is determined in the same manner as the FTAP (as described in the instructions for line 14), except that the funding target is determined using the additional assumptions for plans in at-risk status. For this purpose, the at-risk funding target is determined by disregarding the transition rule of Code section 430(i)(5) and ERISA section 303(i)(5) for plans that have been in at-risk status for fewer than five consecutive years, and disregarding the loading factor in Code section 430(i)(1)(C).

and ERISA section 303(i)(1)(C). For plans that were in at-risk status for the 2018 plan year, the at-risk funding target used to determine whether the plan is in at-risk status for the 2019 plan year is the amount reported in line 4b of the 2018 Schedule SB.

Refer to the regulations under section 430(i) of the Code for rules pertaining to new plans and other special situations.

Line 4. Additional Information for Plans in At-Risk Status.

If the plan is in at-risk status as provided under Code section 430(i)(4) and ERISA section 303(i)(4), check the box, complete lines 4a and 4b, and include as an attachment the information described below. Do not complete line 4 if the plan is not in at-risk status for the current plan year for purposes of determining the minimum required contribution.

- Line 4a – Enter the amount of the funding target determined as if the plan were not in at-risk status.
- Line 4b – Report the funding target disregarding the transition rule of Code section 430(i)(5) and ERISA section 303(i)(5), and disregarding the loading factor in Code section 430(i)(1)(C) and ERISA section 303(i)(1)(C).

If the plan is in at-risk status for the current plan year, attach a description of the at-risk assumptions for the assumed form of payment (e.g., the optional form resulting in the highest present value). Label the attachment **“Schedule SB, line 4 – Additional Information for Plans in At-Risk Status.”**

Line 5. Effective Interest Rate. Enter the single rate of interest which, if used instead of the interest rate(s) reported in line 21 to determine the present value of the benefits that are taken into account in determining the plan’s funding target for a plan year, would result in an amount equal to the plan’s funding target determined for the plan year, without regard to calculations for plans in at-risk status. (This is the funding target reported in line 3d, column (3) for plans not in at-risk status, or in line 4a for plans in at-risk status.) However, if the funding target for the plan year is zero, the effective interest rate is determined as the single rate that would result in an amount equal to the plan’s target normal cost determined for the plan year, without regard to calculations for plans in at-risk status. See the provisions of Code section 430(h)(2)(A), ERISA section 303(h)(2)(A), and the applicable regulations. Enter rate to the nearest .01% (e.g., 5.26%).

Line 6. Target Normal Cost. Report the present value of all benefits which have been accrued or have been earned (or that are expected to accrue or to be earned) under the plan during the plan year, increased by any plan-related expenses expected to be paid from plan assets during the plan year, and decreased (but not below zero) by any mandatory employee contributions expected to be made during the plan year. Include any increase in benefits during the plan year that is a result of any actual or projected increase in compensation during the current plan year, even if that increase in benefits is with respect to benefits attributable to services performed in a preceding plan year.

This amount must be calculated as of the valuation date and must generally be based on the same assumptions used to determine the funding target reported in line 3c, column (3), reflecting the special assumptions and the loading factor for at-risk plans, if applicable. If the plan is in at-risk status for the current plan year and has been in at-risk status for fewer than five consecutive years, report the target normal cost after reflecting the transition rule provided in Code section 430(i)(5) and ERISA section 303(i)(5).

Part II – Beginning of Year Carryover Prefunding Balances

Line 7. Balance at Beginning of Prior Plan Year After Applicable Adjustments. In general, report the amount in the corresponding columns of line 13 of the prior-year Schedule SB. However, if the balance from the prior year has been adjusted so that it does not match the corresponding amount in line 13 of the prior-year Schedule SB, attach an explanation and label the attachment **“Schedule SB, line 7 – Explanation of Discrepancy in Prior Year Funding Standard Carryover Balance or Prefunding Balance.”** Note that elections to add excess contributions or reduce balances have specific deadlines, and generally cannot be changed once they have been made.

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave both columns blank.

Line 8. Portion Elected for Use To Offset Prior Year’s Funding Requirement. Report the amount for each column from the corresponding column of line 35 of the prior-year Schedule SB. If the valuation date is not the first day of the plan year, report the amounts from line 35 of the prior-year Schedule SB, discounted to the beginning of the prior plan year using the effective interest rate for the prior plan year.

Reflect the full amount reported in line 35 of the prior-year Schedule SB even if the amount is larger than the minimum required contribution reported for that year on line 34 of the prior-year Schedule SB. This can occur under the special rule for elections to use balances in excess of the minimum required contribution under section 1.430(f)-1(f)(1)(ii) of the regulations, if no timely election is made to revoke the excess amount.

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave both columns blank.

Special rule for late election to apply balances to quarterly installments. If an election was made to use the funding standard carryover balance or the prefunding balance to offset the amount of a required quarterly installment, but the election was made after the due date of the installment, the amount reported on line 8 may not be the same as the amount reported on line 35 for the prior year. Refer to the regulations under section 430 of the Code for additional information. An attachment to Schedule SB should explain why the amount is different. Label the attachment **“Schedule SB, line 8 – Late Election to Apply Balances to Quarterly Installments.”**

Line 9. Amount Remaining. Enter the amount equal to line 7 minus line 8 in each column.

If this is the first year that the plan is subject to the minimum funding requirements of Code section 430 or ERISA section 303, enter the amount of any credit balance at the end of the prior year (the “pre-effective plan year”) on line 9, column (a) and leave line 9, column (b) blank. The amount entered on line 9, column (a) is generally the amount reported for the pre-effective plan year on line 9o of the 2007 version of the Schedule B form that was submitted as an attachment to the Schedule SB for that pre-effective plan year. If there has been any adjustment to this amount so that it does not match the amount so reported for the pre-effective plan year, attach an explanation and label the attachment **“Schedule SB, line 9 – Explanation of Credit Balance Discrepancy.”**

Line 10. Interest on Line 9. Enter the actual rate of return on plan assets during the preceding plan year in the space provided. Enter the rate to the nearest .01% (e.g., 6.53%). If entering a negative number, enter a minus sign (“-”) to the left of the number. In each column, enter the product of this

interest rate and the amount reported in the corresponding column of line 9.

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave both columns blank.

Line 11. Prior Year's Excess Contributions to be Added to Prefunding Balance.

Line 11a. Enter the amount reported in line 38a on the Schedule SB for the prior plan year.

Line 11b(1). Enter the effective interest rate for the prior plan year, as reported on line 5 of the Schedule SB for the prior plan year, in the space provided. Enter the rate to the nearest .01% (e.g., 6.35%).

In column (b), enter the product of the prior year's effective interest rate in line 11b(1) and the excess (if any) of the amount reported on line 38a for the prior year over the amount reported on line 38b for the prior year.

However, if the valuation date for the prior plan year was not the first day of the plan year (permitted for small plans only), enter the result of the following calculation:

Step 1: Determine the excess (if any) of the amount reported on line 38a for the prior year over the amount reported on line 38b for the prior year,

Step 2: Adjust the result in Step 1 to the first day of the prior year using the effective interest rate for the prior year,

Step 3: Multiply the result in Step 2 by the prior year's effective interest rate in line 11b(1), and

Step 4: Reduce the result in Step 3 by interest on the result in Step 2 of this paragraph for the period between the first day of the prior plan year and the prior-year valuation date using the effective interest rate for the prior year.

The amount reported in line 11b(1) is zero if the prior year's valuation date was the last day of the prior plan year.

Line 11b(2). In column (b), enter the product of the prior year's actual rate of return (from line 10) and the present value of excess contributions reported on line 38b for the prior year.

However, if the valuation date for the prior plan year was not the first day of the plan year (permitted for small plans only), enter the result of the following calculation:

Step 1: Adjust the prior-year amount reported in line 38b to the first day of the prior year, using the effective interest rate for the prior year,

Step 2: Multiply the result in Step 1 by the prior year's actual rate of return (from line 10), and

Step 3: Reduce the result in Step 2 by interest on the result in Step 1 for the period between the first day of the prior plan year and the prior-year valuation date using the effective interest rate for the prior year.

Line 11c. Enter the sum of lines 11a, 11b(1) and 11b(2).

Line 11d. Enter the amount of the excess contributions for the prior year (with interest) that the plan sponsor elected to use to increase the prefunding balance. This amount cannot be greater than the amount reported on line 11c.

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave lines 11a–d blank.

Line 12. Other Reductions in Balances Due to Elections or Deemed Elections. In each column, enter the amount by which the employer elects to reduce (or is deemed to elect to reduce, per Code section 436(f)(3) and ERISA section

206(g)(5)(C)) the funding standard carryover balance or prefunding balance, as applicable, under Code section 430(f) and ERISA section 303(f), other than any amount reported in line 8 that is treated as a reduction in these balances under the special rule in section 1.430(f)-1(f)(3)(ii) (relating to amounts elected for use to offset the minimum required contribution that exceed the minimum required contribution for the plan for the plan year, and which are not revoked by the plan sponsor). This amount cannot be greater than the sum of the amounts reported in the corresponding column of lines 9, 10 and, if applicable, 11d. Note that an election (or deemed election) cannot be made to reduce the prefunding balance in column (b) until the funding standard carryover balance in column (a) has been reduced to zero.

If the valuation date is not the first day of the plan year, adjust the amounts reported in line 12 to the first day of the plan year, using the effective interest rate for the current plan year. If the plan did not exist in the prior year and is not a successor plan, leave both columns blank.

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave column (b) blank.

Line 13. Balance at Beginning of Current Year.

- Column (a) - Enter the sum of the amounts reported on lines 9 and 10 of column (a), minus the amount reported on line 12 of column (a).
- Column (b) - Enter the sum of the amounts reported on lines 9, 10 and 11d of column (b), minus the amount reported on line 12 of column (b).

If this is the first year for which the plan is subject to the minimum funding rules of Code section 430 or ERISA section 303, leave column (b) blank.

Part III – Funding Percentages

Enter all percentages in this section by truncating at .01% (e.g., report 82.649% as 82.64%).

Line 14. Funding Target Attainment Percentage. Enter the funding target attainment percentage (FTAP) determined in accordance with Code section 430(d)(2) and ERISA section 303(d)(2). The FTAP is the ratio (expressed as a percentage) which the actuarial value of plan assets (reduced by the funding standard carryover balance and prefunding balance) bears to the funding target determined without regard to the additional rules for plans in at-risk status.

This percentage is determined by subtracting the sum of the amounts reported in line 13 from line 2b and dividing the result by the funding target. The funding target used for this purpose is the number reported in line 3d, column (3) for plans that are not in at-risk status and line 4a for plans that are in at-risk status. If the plan's valuation date is not the first day of the plan year, subtract the sum of the amounts reported in line 13, adjusted for interest between the beginning of the plan year and the valuation date using the effective interest rate for the current plan year, from the amount reported in line 2b; and divide by the funding target.

Line 15. Adjusted Funding Target Attainment Percentage. Enter the adjusted funding target attainment percentage (AFTAP) determined in accordance with Code section 436(j)(2) and ERISA section 206(g)(9)(B). The AFTAP is calculated in the same manner as the FTAP reported in line 14, except that both the assets and the funding target used to calculate the AFTAP are increased by the aggregate amount of purchases of annuities for employees other than highly compensated employees (as defined in Code section 414(q)) which were made by the plan during the preceding two plan years.

See Code section 436(j)(3) and ERISA section 206(g)(9)(C) for rules regarding circumstances in which the actuarial value of plan assets is not reduced by the funding standard carryover balance and prefunding balance for certain fully-funded plans when determining the AFTAP. Note that this special rule applies only to the calculation of the AFTAP and not to the FTAP reported in line 14.

Report the final certified AFTAP for the plan year, even if it does not correspond to the valuation results reported on this Schedule SB (for instance, if any adjustments pertaining to the plan year were made subsequent to the valuation or the AFTAP). If no AFTAP was certified for the plan year, attach an explanation and (1) report 100%, if the plan's adjusted funding target for the plan year is zero, as described in section 1.436-1(j)(1)(iv) of the Treasury regulations, or (2) leave line 15 blank if the plan's adjusted funding target for the plan year is not equal to zero. Label the attachment, **"Line 15, Reconciliation of differences between valuation results and amounts used to calculate AFTAP."** For plans with valuation dates other than the first day of the plan year, report the AFTAP that is the final certified AFTAP based on the valuation results for the current plan year at the time that the Schedule SB is filed (reflecting contributions for the current plan year and reflecting other adjustments as described in applicable guidance), even if that AFTAP is not used to apply the restrictions under Code section 436 and ERISA section 206(g) until the following plan year.

If the AFTAP reported on line 15 does not correspond to the valuation results reported on this Schedule SB (for instance, if any adjustments pertaining to the plan year were made subsequent to the valuation), attach a schedule showing each AFTAP that was certified or recertified for the plan year, the date of the certification (or recertification), and a description and the amount of each adjustment to the funding target, actuarial value of assets, funding standard carryover balance and prefunding balance used to determine the corresponding AFTAP. Label the attachment, **"Line 15, Reconciliation of differences between valuation results and amounts used to calculate AFTAP."** It is not necessary to include any information pertaining to a range certification in this attachment.

Line 16. Prior Year's Funding Percentage for Purposes of Determining Whether Carryover/Prefunding Balances May Be Used to Offset Current Year's Funding Requirement. Under Code section 430(f)(3) and ERISA section 303(f)(3), the funding standard carryover balance and prefunding balance may not be applied toward minimum contribution requirements unless the ratio of plan assets for the preceding plan year to the funding target for the preceding plan year (as described in Code section 430(f)(3)(C) and ERISA section 303(f)(3)(C)) is 80% or more.

Enter the applicable percentage as described below, truncated at .01% (e.g., report 81.239% as 81.23%). In general, the percentage is the ratio that the prior-year actuarial value of plan assets (reduced by the amount of any prefunding balance, but not the funding standard carryover balance) bears to the prior-year funding target determined without regard to the additional rules for plans in at-risk status. This percentage is determined as follows, with all amounts taken from the prior year's Schedule SB:

- For plans that are not in at-risk status, subtract the amount reported on line 13, column (b) (adjusted for interest as described below, if the valuation date is not the first day of the plan year) from the amount reported on line 2b, and divide the result by the funding target reported on line 3d, column (3).

- For plans that are in at-risk status, subtract the amount reported on line 13, column (b) (adjusted for interest as described below, if the valuation date is not the first day of the plan year) from the amount reported on line 2b, and divide the result by the funding target reported on line 4a.

If the valuation date for the prior plan year was not the first day of that plan year, the amount subtracted from the assets for the purpose of the above calculations is the amount reported on line 13, column(b), adjusted for interest between the beginning of the prior plan year and the prior year's valuation date, using the effective interest rate for the prior plan year.

Line 17. Ratio of Current Value of Assets to Funding Target if Below 70%. This calculation is required under ERISA section 103(d)(11). If line 2a divided by the funding target reported in line 3d, column (3), is less than 70%, enter such percentage. Otherwise, leave this line blank.

Part IV – Contributions and Liquidity Shortfalls

Line 18. Contributions Made to the Plan. Show all employer and employee contributions either designated for this plan year or those allocated to unpaid minimum required contributions for a prior plan year. Do not adjust contributions to reflect interest. Show only employer contributions actually made to the plan within 8½ months after the end of the plan year for which this Schedule SB is filed (or actually made before the Schedule SB is signed, if earlier).

Certain employer contributions must be made in quarterly installments. See Code section 430(j) and ERISA section 303(j). Contributions made to meet the liquidity requirement of Code section 430(j)(4) and ERISA section 303(j)(4) should be reported. Include contributions made to avoid benefit restrictions under Code section 436 and ERISA section 206(g).

Add the amounts in both columns 18(b) and 18(c) separately and enter each result in the corresponding column on the total line. All contributions except those made to avoid benefit restrictions under Code section 436 and ERISA section 206(g) must be credited toward minimum funding requirements for a particular plan year.

Line 19. Discounted Employer Contributions. Employer contributions reported in line 18 that were made on a date other than the valuation date must be adjusted to reflect interest for the time period between the valuation date for the plan year to which the contribution is allocated and the date the contribution was made. In general, adjust each contribution using the effective interest rate for the plan year to which the contribution is allocated, as reported on line 5.

Allocate the interest-adjusted employer contributions to lines 19a, 19b, and 19c to report the purpose for which they were made (as described below).

Attach a schedule showing the dates and amounts of individual contributions, the year to which the contributions (or the portion of individual contributions) are applied, the interest rate(s) used to adjust the contributions (i.e., the effective interest rate for timely contributions and the applicable effective interest rate plus 5% for late quarterly installments) and the periods during which each rate applies, and the interest-adjusted contribution. It is not necessary to include information regarding interest-adjusted contributions allocated toward the minimum required contribution for the current year (reported in line 19c) in this schedule, unless any of those contributions represent late quarterly installments. However, if any of the contributions reported in line 19c represent late quarterly installments, include all contributions reported in line 19c on this schedule. Label the attachment **"Schedule SB, line 19 – Discounted Employer Contributions."**

Special note for small plans with valuation dates after the beginning of the plan year. If the valuation date is after the beginning of the plan year and contributions for the current year were made during the plan year but before the valuation date, such contributions are increased with interest to the valuation date using the effective interest rate for the current plan year. These contributions and the interest calculated as described in the preceding sentence are excluded from the value of assets reported in lines 2a and 2b.

Interest adjustment for contributions representing late required quarterly installments — installments due after the valuation date. If the full amount of a required installment due after the valuation date for the current plan year is not paid by the due date for that installment, increase the effective interest rate used to discount the contribution by 5 percentage points for the period between the due date for the required installment and the date on which the payment is made. If all or a portion of the late required quarterly installment is due to a liquidity shortfall, the increased interest rate is used for a period of time corresponding to the period between the due date for the installment and the end of that quarter, regardless of when the contribution is actually paid.

Interest adjustment for contributions representing late required quarterly installments — small plans with valuation dates after the beginning of the plan year - installments due prior to the valuation date. See the regulations under section 430 for rules regarding interest adjustments for late quarterly contributions for quarterly contributions due before the valuation date.

Line 19a. Contributions Allocated Toward Unpaid Minimum Required Contributions from Prior Plan Years. Under code section 4971(c)(4)(B), if a plan has an unpaid minimum required contribution that has not been corrected at the time a payment is made (i.e., the deadline for making the minimum required contribution for a prior plan year had passed and the minimum required contribution for that year was not yet paid) that payment is allocated first to plan years with unpaid minimum required contributions, beginning with the earliest such plan year, and then to the minimum required contribution for the current plan year. Within a given plan year, payments are credited first to the earliest unpaid installment until the minimum required contribution for that plan year is satisfied. Report any contributions from line 18 that are allocated toward unpaid minimum required contributions from prior plan years, discounted for interest from the date the contribution was made to the valuation date for the plan year for which the contribution was originally required as described above. Increase the effective interest rate for the applicable plan year by 5 percentage points for any portion of the unpaid minimum required contribution that represents a late quarterly installment, for the period between the due date for the installment and the date of payment. Reflect the increased interest rate for any portion of the unpaid minimum required contribution that represents a late liquidity shortfall installment, for the period corresponding to the time between the date the installment was due and the end of the quarter during which it was due. The amount reported in line 19a cannot be larger than the amount reported in line 28.

For the purpose of allocating contribution amounts to unpaid minimum required contributions, any unpaid minimum required contribution attributable to an accumulated funding deficiency at the end of the last plan year before Code section 430 or ERISA section 303 applied to the plan (the “pre-effective plan year”) is treated as a single contribution due on the last day of the pre-effective plan year (without separately identifying any portion of the accumulated funding deficiency

attributable to late quarterly installments or late liquidity shortfall installments), and the associated effective interest rate is deemed to be the valuation interest rate for the pre-effective plan year.

Line 19b. Contributions Made To Avoid Benefit Restrictions. Include in this category current year contributions made to avoid or terminate benefit restrictions under Code section 436 and ERISA section 206(g). Adjust each contribution for interest from the date the contribution was made to the valuation date as described above.

Line 19c. Contributions Allocated Toward Minimum Required Contribution for Current Year. Include in this category contributions (including any contributions made in excess of the minimum required contribution) that are not included in line 19a or 19b. Adjust each contribution for interest from the date the contribution was made to the valuation date as described above.

Line 20. Quarterly Contributions and Liquidity Shortfalls.

Line 20a. Did the Plan Have a Funding Shortfall for the Prior Plan Year? In accordance with Code section 430(j)(3) and ERISA section 303(j)(3), only plans that have a funding shortfall for the preceding plan year are subject to an accelerated quarterly contribution schedule. For this purpose, a plan is considered to have a funding shortfall for the prior year if the funding target reported on line 3d, column (3) is greater than the actuarial value of assets reported on line 2b, reduced by the sum of the funding standard carryover balance and prefunding balance reported on line 13, columns (a) and (b), with all figures taken from the prior year’s Schedule SB.

If the valuation date for the prior plan year was not the first day of that plan year, the amount subtracted from the actuarial value of assets for the above calculation is the sum of the amounts reported on line 13, columns (a) and (b) of the prior-year Schedule SB, but adjusted for interest between the beginning of the prior plan year and the prior year’s valuation date using the effective interest rate for the plan for the prior plan year.

However, see Code section 430(f)(4)(B)(ii) and ERISA section 303(f)(4)(B)(ii) for special rules in the case of a binding agreement with the PBGC providing that all or a portion of the funding standard carryover balance and/or prefunding balance is not available to offset the minimum required contribution for the prior plan year.

Please note that a plan may be considered to have a funding shortfall for this purpose even if it is exempt from establishing a shortfall amortization base under the provisions of Code section 430(c)(5) and ERISA section 303(c)(5).

Line 20b. If line 20a is “No” (i.e., if the plan did not have a funding shortfall in the prior plan year), the plan is not subject to the quarterly contribution rules, and this line should not be completed. If line 20a is “Yes,” check the “Yes” box on line 20b if required installments for the current plan year were made in a timely manner; otherwise, check “No.”

Line 20c. If line 20a is “No,” or the plan had 100 or fewer participants on every day of the preceding plan year (as defined for line F), the plan is not subject to the liquidity requirement of Code section 430(j)(4) and ERISA section 303(j)(4) and this line should not be completed. Attach a certification by the enrolled actuary if the special rule for nonrecurring circumstances is used, and label the certification “**Schedule SB, line 20c –Liquidity Requirement Certification.**” See Code section 430(j)(4)(E)(ii)(II) and ERISA section 303(j)(4)(E)(ii)(II).

If the plan is subject to the liquidity requirement and has a liquidity shortfall for any quarter of the plan year (see Code

section 430(j)(4)(E) and ERISA section 303(j)(4)(E)), enter the amount of the liquidity shortfall for each such quarter. If the plan was subject to the liquidity requirement but did not have a liquidity shortfall, enter zero. File IRS Form 5330, Return of Excise Taxes Related to Employee Benefit Plans, with the IRS to pay the 10% excise tax(es) if there is a failure to pay any liquidity shortfall by the required due date, unless a waiver of the 10% tax has been granted under Code section 4971(f)(4).

Part V – Assumptions Used To Determine Funding Target and Target Normal Cost

Line 21. Discount Rate. All discount rates are to be reported and used as published by the IRS, and are to be applied as annual rates without adjustment.

Line 21a. Enter the three segment rates used to calculate the funding target and target normal cost as provided under Code section 430(h)(2)(C) and ERISA section 303(h)(2)(C) and as published by the IRS, unless the plan sponsor has elected to use the full yield curve. If the sponsor has elected to use the full yield curve, check the “N/A, full yield curve used” box.

Line 21b. Code section 430(h)(2)(E) and ERISA section 303(h)(2)(E) provide that the segment rate(s) used to measure the funding target and target normal cost are those published by Treasury for the month that includes the valuation date (based on the average of the monthly corporate bond yield curves for the 24-month period ending with the month preceding that month). Alternatively, at the election of the plan sponsor, the segment rate(s) used to measure the funding target and target normal cost may be those published by Treasury for any of the four months that precede the month that includes the valuation date.

Enter the applicable month to indicate which segment rates were used to determine the funding target and target normal cost. Enter “0” if the rates used to determine the funding target and target normal cost were published for the month that includes the valuation date. Enter “1” if the rates were published for the month immediately preceding the month that includes the valuation date, “2” for the second preceding month, and “3” or “4,” respectively, for the third or fourth preceding months. For example, if the valuation date is January 1 and the funding target and target normal cost were determined based on rates published for November, enter “2.”

Note. The plan sponsor’s interest rate election under Code section 430(h)(2) or ERISA section 303(h)(2) (an election to use the yield curve or an election to use an applicable month other than the default month) generally may not be changed unless the plan sponsor obtains approval from the IRS. However, see the regulations under section 430(h)(2) for circumstances in which a change in interest rate may be made without obtaining approval from the IRS.

Line 22. Weighted Average Retirement Age. Enter the weighted average retirement age for active participants. If the plan is in at-risk status, enter the weighted average retirement age as if the plan were not in at-risk status. If each participant is assumed to retire at his/her normal retirement age, enter the age specified in the plan as normal retirement age. If the normal retirement age differs for individual participants, enter the age that is the weighted average normal retirement age; do not enter “NRA.” Otherwise, enter the assumed retirement age. If the valuation uses rates of retirement at various ages, enter the nearest whole age that is the weighted average retirement age.

On an attachment to Schedule SB, list the rate of retirement at each age and describe the methodology used to compute the weighted average retirement age, including a description of the weight applied at each potential retirement

age, and label the attachment “**Schedule SB, line 22 – Description of Weighted Average Retirement Age.**”

Line 23. Mortality Tables. Mortality tables described in Code section 430(h)(3), ERISA section 303(h)(3), and section 1.430(h)(3)-1 of the regulations as published by the IRS must be used to determine the funding target and target normal cost for non-disabled participants and may be used to determine the funding target and target normal cost for disabled participants, unless the IRS has approved (or was deemed to have approved) the use of a substitute mortality table for the plan. Standard mortality tables must be either applied on a generational basis, or the tables must be updated to reflect the static tables published for the year in which the valuation date occurs. Substitute mortality tables must be applied in accordance with the terms of the IRS ruling letter.

Separate standard mortality tables were published by the IRS for annuitants (rates applying for periods when a participant is assumed to receive a benefit under the plan) and nonannuitants (rates applying to periods before a participant is assumed to receive a benefit under the plan). If a plan has 500 or fewer participants as of the valuation date for the current plan year as reported in line 3d, column (1), the plan sponsor can elect to use the combined mortality tables published by the IRS, which reflect combined rates for both annuitants and nonannuitants.

Check the applicable box to indicate which set of mortality tables was used to determine the funding target and target normal cost. If one set of mortality tables was used for certain populations within the plan and a different set of mortality tables was used for other populations, check the box for the set of mortality tables that applied to the largest population. If more than one set of mortality tables were used (other than for disabled lives pursuant to section 430(h)(3)(D)), attach a statement describing the mortality tables used for each population and the size of that population. Label the attachment “**Schedule SB, line 23 – Information on Use of Multiple Sets of Mortality Tables.**”

- Check “Prescribed–combined” if the funding target and target normal cost are based on the prescribed tables with combined annuitant/nonannuitant mortality rates.
- Check “Prescribed–separate” if the funding target and target normal cost are based on the prescribed tables with separate mortality rates for nonannuitants and annuitants.
- Check “Substitute” if the funding target and target normal cost are based on substitute mortality tables. If substitute mortality tables are used, attach a statement including a summary of plan populations for which substitute mortality tables are used, plan populations for which the prescribed tables are used, the mortality ratio used to develop the table for any population, whether the table is constructed based on full or partial credibility, the partial credibility weighting factor if applicable, plan populations for which the prescribed tables are used, and the last plan year for which the IRS approval of the substitute mortality tables applies. Label the attachment “**Schedule SB, line 23 – Information on Use of Substitute Mortality Tables.**”

Attach a statement of actuarial assumptions and funding methods used to calculate the Schedule SB entries and label the statement “**Schedule SB, Part V – Statement of Actuarial Assumptions/Methods.**” The statement must describe all non-prescribed actuarial assumptions (e.g., retirement, withdrawal rates) used to determine the funding target and target normal cost, including the assumption as to the frequency with which participants are assumed to elect each optional form of benefit (including lump sum distributions), whether mortality tables are

Schedule SB, line 26 –Schedule of Active Participant Data

Attained Age	YEARS OF CREDITED SERVICE											
	Under 1			1 to 4			5 to 9			40 & up		
	Average			Average			Average			Average		
	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.
Under 25												
25 to 29												
30 to 34												
35 to 39												
40 to 44												
45 to 49												
50 to 54												
55 to 59												
60 to 64												
65 to 69												
70 & up												

applied on a static or generational basis, whether combined mortality tables are used instead of separate annuitant and nonannuitant mortality tables (for plans with 500 or fewer participants as of the valuation date), and (for target normal cost) expected plan-related expenses and increases in compensation. For applicable defined benefit plans under Code section 411(a)(13)(C) and ERISA section 203(f)(3) (e.g., cash balance plans) the statement must include the assumptions used to convert balances to annuities. In addition, the statement must describe the method for determining the actuarial value of assets and any other aspects of the funding method for determining the Schedule SB entries that are not prescribed by law.

Also attach a summary of the principal eligibility and benefit provisions on which the valuation was based, including the status of the plan (e.g., frozen eligibility, service/pay, or benefits), optional forms of benefits, special plan provisions, including those that apply only to a subgroup of employees (e.g., those with imputed service), supplemental benefits, and identification of benefits not included in the valuation, a description of any significant events that occurred during the year, a summary of any changes in principal eligibility or benefit provisions since the last valuation, and a description (or reasonably representative sample) of plan early retirement reduction factors and optional form conversion factors. Label the summary ***“Schedule SB, Part V – Summary of Plan Provisions.”***

Also, include any other information needed to disclose the actuarial position of the plan fully and fairly.

Part VI – Miscellaneous Items

Line 24. Change in Non-Prescribed Actuarial Assumptions.

If a change has been made in the non-prescribed actuarial assumptions for the current plan year, check “Yes.” If the only assumption changes are statutorily required changes in the discount or mortality rates, or changes required for plans in at-risk status, check “No.” Include as an attachment a description of any change in non-prescribed actuarial assumptions and justifications for any such change. (See section 103(d) of ERISA.) Label the attachment ***“Schedule SB, line 24 – Change in Actuarial Assumptions.”***

If the “Yes” box is checked and the non-prescribed assumptions have been changed in a way that decreases the funding shortfall for the current plan year, approval for such a change may be required.

Line 25. Change in Method. If a change in the method has been made for the current plan year, check “Yes.” For this purpose, a change in funding method refers to not only a

change in the overall method used by the plan, but also each specific method of computation used in applying the overall method. Accordingly, funding method changes include modifications such as a change in the method for calculating the actuarial value of assets or a change in the valuation date (not an exclusive list). Also check “Yes” if there has been a change in the method for determining the discount rates reported in line 21. In general, any changes in a plan’s method must be approved by the IRS. However, see the regulations under Code section 430 and Revenue Procedure 2017-56, 2017-44 IRB 465, for circumstances in which a change in method may be made without obtaining approval from the IRS.

Include, as an attachment, a description of the change. Label the attachment ***“Schedule SB, line 25 – Change in Method.”***

Note. The plan sponsor’s agreement to certain changes in funding method should be reported on line 8 of Schedule R (Form 5500).

Line 26. Schedule of Active Participant Data. Check “Yes” only if (a) the plan is covered by Title IV of ERISA and (b) the plan has active participants.

If line 26 is “Yes,” attach a schedule of the active plan participant data used in the valuation for this plan year. Use the format shown on the following page and label the schedule ***“Schedule SB, line 26 – Schedule of Active Participant Data.”***

Expand this schedule by adding columns after the “5 to 9” column and before the “40 & up” column for active participants with total years of credited service in the following ranges: 10 to 14; 15 to 19; 20 to 24; 25 to 29; 30 to 34; and 35 to 39. For each column, enter the number of active participants with the specified number of years of credited service divided according to age group. For participants with partial years of credited service, truncate the total number of years of credited. Years of credited service are the years credited under the plan’s benefit formula.

Plans reporting 1,000 or more active participants on line 3d, column (1), must also provide average compensation data. For each grouping, enter the average compensation of the active participants in that group. For this purpose, compensation is the compensation taken into account for each participant under the plan’s benefit formula, limited to the amount defined under section 401(a)(17) of the Code. Do not enter the average compensation in any grouping that contains fewer than 20 participants.

In the case of a plan under which benefits are primarily pay-related and under which no future accruals are granted (i.e., a “hard-frozen” plan as defined in the instructions for plan

characteristic “1” applicable to line 8a of the Form 5500), report the average annual accrued benefit in lieu of average compensation. Include a note on the scatter indicating that the plan is “hard frozen” and the average accrued benefits are in lieu of compensation.

Cash balance plans (or any plans using characteristic code 1C on line 8a of Form 5500) reporting 1,000 or more active participants on line 3d, column (1), must also provide average cash balance account data, regardless of whether all active participants have cash balance accounts. For each age/service bin, enter the average cash balance account of the active participants in that bin. Do not enter the average cash balance account in any age/service bin that contains fewer than 20 active participants.

General Rule. When all active participants in the plan have a cash balance account, data to be shown in each bin includes:

1. The number of active participants in the age/service bin,
2. The average compensation of the active participants in the age/service bin, and
3. The average cash balance account of the active participants in the age/service bin.

If the accrued benefit is the greater of a cash balance benefit or some other benefit, average in only the cash balance account. If the accrued benefit is the sum of a cash balance account benefit and some other benefit, average in only the cash balance account. For both the average compensation and the average cash balance account, do not enter an amount for age/service bins with fewer than 20 active participants.

When some active participants do not have cash balance accounts, an alternative is provided for showing compensation and cash balance accounts, requiring two age/service scatters as follows:

- Scatter 1 – Provide participant count and average compensation for *all* active participants.
- Scatter 2 – Provide participant count and average cash balance account for only those active participants with account-based benefits. If the number of participants with account-based benefits in a bin is fewer than 20, the average account should not be shown even if there are 20 or more active participants in this bin on Scatter 1.

In general, information should be determined as of the valuation date. Average cash balance accounts may be determined as of either:

1. The valuation date or
2. The day immediately preceding the valuation date.

Average cash balance accounts that are offset by amounts from another plan may be reported either as amounts prior to taking into account the offset or as amounts after taking into account the offset. Do not report the offset amount. For this or any other unusual or unique situation, the attachment should include an explanation of what is being provided.

If the plan is a multiple-employer plan, complete one or more schedules of active-participant data in a manner consistent with the computations for the funding requirements reported in Part VIII. For example, if the funding requirements are computed as if each participating employer maintained a separate plan, attach a separate **“Schedule SB, line 26 – Schedule of Active Participant Data”** for each participating employer in the multiple-employer plan.

Line 27. Alternative Funding Rules. If one of the alternative funding rules was used for this plan year, enter the appropriate code from the table below and follow the special instructions applicable to that code, including completion of any required attachments.

Code	Alternative Funding Rule
1	A CSEC plan that is described in Code section 414(y). This includes certain multiple-employer plans maintained by rural cooperatives and other specified cooperative organizations and certain plans maintained by more than 1 employer (determined after application of Code section 414(b) and (c)), all of which are described in Code section 501(c)(3). Do not use Code 1 for a plan that satisfies the definition of a CSEC plan that has made the election to not be treated as a CSEC plan.
2	This code, formerly used by certain plans maintained by PBGC settlements as described in section 105 of PPA, is no longer applicable and should not be used
3	Reserved
4	Plans with binding agreements with PBGC to maintain prefunding and/or funding standard carryover balances described in Code section 430(f)(4)(B)(ii) and ERISA section 303(f)(4)(B)(ii)
5	This code, formerly used by airlines using 10-year amortization period for initial post-PPA shortfall amortization base under section 402(a)(2) of PPA (as amended), is no longer applicable and should not be used.
6	Airlines with frozen plans using alternative 17-year funding schedule under section 402(a)(1) of PPA
7	Interstate transit company described in section 115 of PPA
8	This code, formerly used by a plan subject to section 104 of PPA (as amended) that is not a CSEC plan, is no longer applicable and should not be used.

Special Instructions for codes 1 through 8

CSEC Plans, as described in Code section 414(y) and subject to Code section 433 (code 1).

Complete only the following on Schedule SB:

- Lines A through F
- Part I (including signature of enrolled actuary), determined as if PPA '06 provisions were effective for all plan years beginning after December 31, 2007.
- Part III, line 14, determined as if PPA '06 provisions were effective for all plan years beginning after December 31, 2007.
- Part IV, line 18.
- Part V, determined as if PPA '06 provisions were effective for all plan years beginning after December 31, 2007.

Also, report other information for the current plan year using a 2007 Schedule B (Form 5500). Label this attachment **“2019 Schedule SB, line 27 – Actuarial Information for CSEC Plans.”** Each attachment must include the plan name, the plan sponsor's name and EIN, and the plan number. Complete all items from the 2007 Schedule B, excluding line 9f and Part II,

and attach the 2007 Schedule B and all applicable attachments to the Schedule SB. Note that under PPA '06, the third segment rate determined under § 430(h)(2)(C)(iii) and ERISA section 303(h)(2)(C)(iii) is substituted for the current liability interest rate under § 412(b)(5)(B) and ERISA section 302(b)(5)(B) (as in effect before PPA '06).

If the plan's funded percentage (as defined in § 433(j)(5)(B)) as of the beginning of the plan year is less than 80%, then the plan is in funding restoration status. If the plan's enrolled actuary certifies that the plan is in funding restoration status for a plan year, include the following additional information in the attachment "2019 Schedule SB, line 27 – Actuarial Information for CSEC Plans:" (a) the annual certification by the enrolled actuary for the plan; and (b) the value of plan assets and the funding liability, including any adjustments to these amounts as specified in § 433(j)(4) and ERISA section 306(j)(4).

If a plan in funding restoration status has an accumulated funding deficiency based on the excess of the employer's normal cost determined under line 9b, over the amount actually contributed to the plan for the plan year, as determined under § 433(j)(1) and ERISA section 306(j)(1), then the details of this calculation must be included in the attachment "2019 Schedule SB, line 27 – Actuarial Information for CSEC Plans." In the case of a plan for which a spread gain funding method is used, the normal cost that is used to apply this rule is the normal cost determined under the entry age normal cost funding method.

Plans with binding agreements with the PBGC to maintain prefunding and/or carryover balances (code 4). Complete the entire Schedule SB and attachments as outlined in these instructions. In addition, report on an attachment the amount subject to the binding agreement with the PBGC, reported separately for the funding standard carryover balance and prefunding balance. Label the attachment "**Schedule SB, line 27 – Balances Subject to Binding Agreement with PBGC.**"

Airlines with frozen plans using alternative 17-year funding schedule (code 6). Complete the following lines on Schedule SB and provide associated attachments:

- Lines A through F.
- Part I (including signature of enrolled actuary) – complete all lines.
- Parts III through VII – complete all lines.

For this purpose, disregard the special funding rules under section 402(e) of PPA except for the information reported on the following lines:

- Line 19 – Discount contributions to the applicable valuation date using the 8.85% discount rate provided under section 402(e)(4)(B) of PPA.
- Line 20 – Reflect required quarterly installments based on the minimum required contribution determined under section 402(e) of PPA to the extent applicable (i.e., for purposes of calculating the required annual payment under Code section 430(j)(3)(D)(ii)(I) and ERISA section 303(j)(3)(D)(ii)(I)).
- Line 29 – Reflect the minimum required contribution determined under section 402(e) of PPA when determining the unpaid minimum required contribution.

Also, attach a worksheet showing the information below, determined in accordance with section 402(e) of PPA. Label this worksheet "**Schedule SB, line 27 – Alternative 17-Year Funding Schedule for Airlines.**"

- Date as of which plan benefits were frozen as required under section 402(b)(2) of PPA.
- Date on which the first applicable plan year began.

- Accrued liability under the unit credit method calculated as of the first day of the plan year, using an interest rate of 8.85%.
- A summary of all other assumptions used to calculate the unit credit accrued liability.
- Fair market value of assets as of the first day of the plan year.
- Unfunded liability under section 402(e)(3)(A) of PPA.
- Alternative funding schedule:

1. Contribution necessary to amortize the unfunded liability over the remaining number of years, assuming payments at the valuation date for each plan year and using an interest rate of 8.85%;

2. Employer contributions for the plan year, discounted for interest to the valuation date for the plan year, and using a rate of 8.85%; and

3. Contribution shortfall, if any ((1)-(2) but not less than zero).

Interstate transit company (code 7). Complete the entire Schedule SB, reflecting the modifications to the otherwise-required funding rules under section 115(b) of PPA, and disregarding the attachment required for plans reporting the use of the substitute mortality table in line 23.

Part VII – Reconciliation of Unpaid Minimum Required Contributions for Prior Years

Line 28. Unpaid Minimum Required Contributions for Prior Years. Enter the total amount of any unpaid minimum required contributions for all years from line 40 of the Schedule SB for the prior plan year.

If this is the first year that the plan is subject to the minimum funding requirements of Code section 430 or ERISA section 303, enter the amount of any accumulated funding deficiency at the end of the prior year (the pre-effective plan year). This is the amount reported on line 9p of the 2007 Schedule B form that was submitted as an attachment to the Schedule SB for the pre-effective plan year.

Line 29. Employer Contributions Allocated Toward Unpaid Minimum Required Contributions from Prior Years. Enter the total amount of discounted contributions made for the current plan year allocated toward unpaid minimum required contributions from prior years as reported in line 19a.

Line 30. Remaining Unpaid Minimum Required Contributions. Enter the amount in line 28 minus the amount in line 29.

Part VIII – Minimum Required Contribution for Current Year

Line 31. Target Normal Cost and Excess Assets.

Line 31a. Target Normal Cost (line 6). Enter the target normal cost as reported in line 6.

Line 31b. Excess Assets. Enter the excess, if any, of the value of assets reported on line 2b reduced by any funding standard carryover balance and prefunding balance on line 13, columns (a) and (b), over the funding target reported on line 3d, column (3). If the valuation date is not the first day of the plan year, excess assets are determined as the value of assets reported on line 2b reduced by any funding standard carryover balance and prefunding balance reported on line 13, columns (a) and (b), adjusted for interest at the effective interest rate for the period between the beginning of the plan year and the valuation date, minus the funding target reported on line 3d, column (3) (but not less than zero). Limit the amount reported in line 31b so that it is not greater than the target normal cost reported in line 31a.

Line 32. Amortization Installments.

Line 32a. Shortfall Amortization Bases and Amortization Installments. *Outstanding balance* — If the plan's funding shortfall (determined under Code section 430(c)(4) and ERISA section 303(c)(4)) is zero, all amortization bases and related installments are considered fully amortized. In this case, enter zero. Otherwise, enter the sum (but not less than zero) of the outstanding balances of all shortfall amortization bases (including any new shortfall amortization base established for the current plan year). The outstanding balance for each amortization base established in past years is equal to the present value as of the valuation date of any remaining amortization installments for each base (including the amortization installment for the current plan year), using the interest rates reported on line 21.

A plan is generally exempt from the requirement to establish a new shortfall amortization base for the current plan year if the funding target reported on line 3d, column (3), is less than or equal to the reduced value of assets as described below.

For the purpose of determining whether a plan is exempt from the requirement to establish a new shortfall amortization base for the current plan year, the reduced value of assets is the amount reported on line 2b, reduced by the full value of the prefunding balance reported on line 13, column (b), adjusted for interest for the period between the beginning of the plan year and the valuation date using the effective interest rate for the current plan year, if the valuation date is not the first day of the plan year. However, the assets are reduced by the prefunding balance if and only if the plan sponsor has elected to use any portion of the prefunding balance to offset the minimum required contribution for the current plan year, as reported on line 35. The assets are not reduced by the amount of any funding standard carryover balance for this calculation regardless of whether any portion of the funding standard carryover balance is used to offset the minimum required contribution for the plan year.

If the plan is not exempt from the requirement to establish a new shortfall amortization base for the current plan year, the amount of that base is generally equal to the difference between the funding shortfall as of the valuation date (determined under Code section 430(c)(4) and ERISA section 303(c)(4)) and the sum of any outstanding balances of any previously established shortfall and waiver amortization bases. The new shortfall amortization base may be either greater than or less than zero.

For the purpose of determining the amount of any new shortfall amortization base, the funding shortfall is equal to the amount of the funding target reported on line 3d, column (3), minus the reduced value of assets, but not less than zero.

If the plan's valuation date is the first day of the plan year, then the reduced value of assets for the purpose of determining the amount of any new shortfall amortization base is the amount reported on line 2b, reduced by the sum of the funding standard carryover balance and the prefunding balance reported on line 13, columns (a) and (b). However, if the plan's valuation date is not the first day of the plan year, then the reduced value of assets for the purpose of determining the amount of any new shortfall amortization base is the amount reported on line 2b, reduced by the sum of the funding standard carryover balance and the prefunding balance reported on line 13, columns (a) and (b), adjusted for interest for the period between the beginning of the plan year and the valuation date (using the effective interest rate for the current plan year). See Code section 430(f)(4)(B)(ii) and ERISA section 303(f)(4)(B)(ii) for special rules in the case of a binding agreement with the PBGC providing that all or a portion of the funding standard carryover balance and/or prefunding balance is not available to offset the minimum required contribution for the plan year.

Shortfall amortization installment — Enter the sum (but not less than zero) of:

1. Any shortfall amortization installments that were established to amortize shortfall amortization bases established in prior years, excluding amortization installments for bases that have been or are deemed to be fully amortized, and
2. The shortfall amortization installment that corresponds to any new shortfall amortization base established for the current plan year. This amount is the level amortization payment that will amortize the new shortfall amortization base over 7 annual payments, using the interest rates reported in line 21 for the current plan year.

Note. Shortfall amortization installments for a given shortfall amortization base are not re-determined from year to year regardless of any changes in interest rates or valuation dates.

Note. If an election was made to use an alternative shortfall amortization schedule under Code section 430(c)(2)(D) and ERISA section 303(c)(2)(D) added by PRA 2010, the shortfall amortization installment is the amount determined in accordance with the shortfall amortization schedule chosen and guidance issued by Treasury and the IRS. Include any increase to the shortfall amortization installment for this year due to the installment acceleration amount, as provided in Code section 430(c)(7) and ERISA section 303(c)(7).

Line 32b. Waiver Amortization Bases and Amortization Installments. *Outstanding balance* — If the plan's funding shortfall (determined under Code section 430(c)(4) and ERISA section 303(c)(4)) is zero, all waiver amortization bases and related installments are considered fully amortized. In this case, enter zero. Otherwise, enter the present value as of the valuation date of all remaining waiver amortization installments (including any installment for the current plan year), using the interest rates reported on line 21. Do not include any new waiver amortization base established for a waiver of minimum funding requirements for the current plan year.

Waiver amortization installments — Enter the sum of any remaining waiver amortization installments that were established to amortize any waiver amortization bases for prior plan years, unless such bases have been or are deemed to be fully amortized. Do not include an amortization installment for any new waiver amortization base established for a waiver of minimum funding requirements for the current plan year.

Note. If a waiver of minimum funding requirements has been granted for the current plan year, a waiver amortization base is established as of the valuation date for the current plan year equal to the amount of the funding waiver reported in line 33. The waiver amortization installment that corresponds to any waiver amortization base established for the current year is the level amortization payment that will amortize the new waiver amortization base over 5 annual payments, using the same segment interest rates or rates from the full yield curve reported on line 21 for the *current* plan year, but with the first payment due on the valuation date for the *following* plan year. The amount of the waiver amortization base and the waiver amortization installments for this base are not reported in line 32b for the year in which they are established. Rather, these are included in the entries for line 32b on the Schedule SB for the following plan year.

Note. Waiver amortization installments (including the waiver amortization installments of any waiver amortization base established for the prior plan year) are not re-determined from year to year regardless of any changes in interest rates or valuation dates.

Required attachment. If there are any shortfall or waiver amortization bases, include as an attachment a listing of all bases (other than a base established for a funding waiver for the current plan year) showing for each base:

1. The type of base (shortfall or waiver),
2. The present value of any remaining installments (including the installment for the current plan year),
3. The valuation date as of which the base was established,
4. The number of years remaining in the amortization period, and
5. The amortization installment.

If a base is negative (i.e., a "gain base"), show amounts in parentheses or with a negative sign in front of them. All amounts must be calculated as of the valuation date for the plan year.

If any of the shortfall amortization bases shown on this attachment are being amortized using an alternative amortization schedule in accordance with Code section 430(c)(2)(D) or ERISA section 303(c)(2)(D), identify the amortization schedule being used and show separately the amount of any installment acceleration amount added to the shortfall amortization installment for the current plan year under Code section 430(c)(7) or ERISA section 303(c)(7). Label the schedule **"Schedule SB, line 32 – Schedule of Amortization Bases."**

Line 33. Funding Waiver. If a waiver of minimum funding requirements has been approved for the current plan year, enter the date of the ruling letter granting the approval and the waived amount (reported as of the valuation date) in the spaces provided. *If a waiver is pending, do not complete this line.* If a pending waiver is granted after Form 5500 is filed, file an amended Form 5500 with an amended Schedule SB.

Line 34. Total Funding Requirement Before Reflecting Carryover/Prefunding Balances. Enter the target normal cost in line 31a, minus the excess assets in line 31b, plus the amortization installments reported in lines 32a and 32b, reduced by any waived amounts reported in line 33.

Line 35. Balances Elected for Use to Offset Funding Requirement. If the percentage reported on line 16 is at least 80%, and the plan has a funding standard carryover balance and/or prefunding balance (as reported on line 13, columns (a) and (b)), the plan sponsor may elect to credit all or a portion of such balances against the minimum required contribution. Enter the amount of any balance elected for use for this purpose in the applicable column of line 35, and enter the total in the column headed "Total Balance." No portion of the prefunding balance can be used for this purpose unless the full amount of any remaining funding standard carryover balance (line 13, column (a)) is used. The amounts entered on line 35 cannot be larger than the corresponding amounts on line 13 (unless the plan's valuation date is not the first day of the plan year, as discussed below).

If the plan's valuation date is not the first day of the plan year, adjust the portion of the funding standard carryover balance and prefunding balance used to offset the minimum required contribution for interest between the beginning of the plan year and the valuation date using the effective interest rate for the current plan year.

Special rule for late election to apply balances to quarterly installments. If an election was made to use the funding standard carryover balance or the prefunding balance to offset the amount of a required quarterly installment, but the election was made after the due date of the installment, the amount reported on line 35 may not be the same amount that is subtracted from the plan's balances in the following plan year (to

be reported in line 8 of Schedule SB for the following plan year). Refer to the regulations under Section 430 of the Code for additional information.

Special rule for elections to use balances in excess of the minimum required contribution. Section 1.430(f)-1(f)(3)(ii) of the regulations provides an exception to the general rule requiring that any elections to use the funding standard carryover balance and/or prefunding balance to offset the minimum required contribution are irrevocable. Under this exception, such an election may be revoked to the extent that the amount of the election exceeds the minimum required contribution for the plan year as reported in line 34. If a timely election is made to revoke the excess amount, report only the amount of the election used to offset the minimum required contribution on line 35. If the excess amount is not revoked by means of a timely election, report the full amount of the election on line 35 even if it exceeds the minimum required contribution reported on line 34.

Line 36. Additional Cash Requirement. Enter the amount in line 34 minus the amount in the "Total Balance" column in line 35. (The result cannot be less than zero.) This represents the contribution needed to satisfy the minimum funding requirement for the current year, adjusted for interest to the valuation date.

Line 37. Contributions Allocated Toward Minimum Required Contribution for Current Year, Adjusted to Valuation Date. Enter the amount reported in line 19c.

Line 38. Present Value of Excess Contributions for Current Year.

Line 38a. If line 37 is greater than line 36, enter the amount by which line 37 exceeds line 36. Otherwise, enter "0." This amount (plus interest, if applicable) is the maximum amount by which the plan sponsor may elect to increase the prefunding balance.

Line 38b. Enter the amount of any portion of the amount shown on line 38a that results solely from the use of the funding standard carryover balance and/or prefunding balance to offset the minimum required contribution.

Line 39. Unpaid Minimum Required Contribution for Current Year. If line 37 is less than line 36, enter the amount by which line 36 exceeds line 37. Otherwise, enter "0".

Line 40. Unpaid Minimum Required Contributions for All Years. Enter the sum of the remaining unpaid minimum required contributions from line 30 and the unpaid minimum required contribution for the current year from line 39. If this amount is greater than zero, file IRS Form 5330, Return of Excise Taxes Related to Employee Benefit Plans and pay the 10% excise tax on the unpaid minimum required contributions. In addition, if this is a PBGC-covered plan and reporting to PBGC is not waived under 29 CFR 4043.25(c), file PBGC Form 10 or PBGC Form 200, whichever is applicable.

Part IX – Election to Use Pension Funding Relief under PRA 2010

Note. This section is completed only if:

- (1) an election was made to use an alternative shortfall amortization schedule for any election year under Code section 430(c)(2)(D) or ERISA section 303(c)(2)(D), or
- (2) in the case of a plan subject to a delayed effective date for PPA funding rules under section 104 of PPA, an election was made to determine the minimum required contribution for any election year using the extended amortization periods under section 107 of PPA '06, as added by PRA 2010 (complete lines 41a and 41b only).

Line 41a. Schedule elected. Check the applicable box to indicate which alternative shortfall amortization schedule is being used, the 2 plus 7-year schedule or the 15-year schedule.

Line 41b. Eligible plan year(s) for which the election in line 41a was made. Check the box(es) to indicate the eligible plan years for which the election was made to use an alternative amortization schedule under Code section 430(c)(2)(D) or ERISA section 303(c)(2)(D) or the relief under section 107 of PPA '06 as added by PRA 2010. Note that an election to use an alternative amortization schedule may only be made with respect to one or two eligible plan years. Refer to Code section 430(c)(2)(D)(v) or ERISA section 303(c)(2)(D)(v) for the definition of eligible plan years.