
2019 Instructions for Schedule MB (Form 5500) Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information

General Instructions

Who Must File

As the first step, the plan administrator of any multiemployer defined benefit plan that is subject to the minimum funding standards (see Code sections 412 and 431 and Part 3 of Title I of ERISA) **must** obtain a completed Schedule MB (Form 5500) 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 MB that is prepared and signed by the plan's actuary.

Next, the plan administrator of a multiemployer defined benefit plan must ensure that the information from the actuary's Schedule MB 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 multiemployer defined benefit plan must attach to the Form 5500 an electronic reproduction of the Schedule MB prepared and signed by the plan's enrolled actuary. This electronic reproduction must be labeled "**MB Actuary Signature**" and must be included as a Portable Document Format (PDF) attachment or any alternative electronic attachment allowable under EFAST2.

If a money purchase defined contribution plan (including a target benefit plan) has received a waiver of the minimum funding standard, and the waiver is currently being amortized, lines 3, 9, and 10 of Schedule MB must be completed but it need not be signed by an enrolled actuary. In such a case, the Form 5500 or the Form 5500-SF that is submitted under EFAST2 must include the Schedule MB with lines 3, 9, and 10 completed, but is not required to include a PDF attachment of a signed Schedule MB.

Note. Schedule MB does not have to be filed with the Form 5500-EZ, but, if required, it must be retained (in accordance with the instructions for Form 5500-EZ under the *What to File* section). Similarly, if a plan is a one-participant plan that meets the requirements for filing a Form 5500-EZ, but a Form 5500-SF is instead filed for the plan, the Schedule MB, if required, does not have to be filed with the Form 5500-SF, but it must be retained (in accordance with the instructions for the Form 5500-SF under Schedule MB in the *Specific Instructions Only for "One-Participant Plans"* section). Also, the funding standard account for the plan must continue to be maintained, even if the Schedule MB is not filed.

Check the Schedule MB box on the Form 5500 (Part II, line 10a(2)) if a Schedule MB is attached to the Form 5500.

Lines A through E **must** be completed for ALL plans. If the Schedule MB is attached to a Form 5500 or Form 5500-SF, lines A, B, C, and D should include the same information as reported in Part II of the Form 5500 or Form 5500-SF. You may abbreviate the plan name.

Do not use a social security number in line D in lieu of an EIN. The Schedule MB 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 subject to publication on the Internet. Because of privacy concerns, the inclusion of a social security number or any portion thereof on this Schedule MB 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 the *General Instructions to Form 5500* and *How to File – Electronic Filing Requirement* under the *General Instructions to Form 5500-SF*. The EBSA does not issue EINs.

Note. (1) For split-funded plans, the costs and contributions reported on Schedule MB must include those relating to both trust funds and insurance carriers. **(2)** For plans with funding standard account amortization charges and credits, see the instructions for lines 9c and 9h. **(3)** For terminating multiemployer plans, Code section 412(e)(4) and ERISA section 301(c) provide that minimum funding standards apply until the last day of the plan year in which the plan terminates within the meaning of section 4041A(a)(2) of ERISA. Accordingly, the Schedule MB is not required to be filed for any later plan year.

Statement by Enrolled Actuary

An enrolled actuary must sign Schedule MB unless, as described above, the plan is a money purchase defined contribution plan that has received a waiver of the minimum funding standard. 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. Except as otherwise provided in these instructions, a stamped or machine produced signature is not acceptable. If the actuary has not fully reflected any final or temporary regulation, revenue ruling, or notice promulgated under the statute in completing the Schedule MB, check the box on the last line of page 1. If this box is checked, indicate on an attachment whether an accumulated funding deficiency 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 MB – Statement by Enrolled Actuary.**" In addition, the actuary may offer any other comments related to the information contained in Schedule MB.

The actuary must provide the completed and signed Schedule MB to the plan administrator to be retained with the plan records and included (in accordance with these instructions) with the Form 5500 that is submitted under EFAST2. The plan's actuary is permitted to sign the Schedule MB 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 MB that is prepared and signed by the plan's actuary.

Attachments

All attachments to the Schedule MB must be properly identified, and must include the name of the plan, the plan sponsor's EIN, and the plan number. Put "Schedule MB" and the line number to which the attachment relates at the top of each attachment. Do not include attachments that contain a visible social security number. The Schedule MB 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.

Specific Instructions

Line 1. All entries must be reported as of the valuation date.

Line 1a. Actuarial Valuation Date. The valuation for a plan year may be as of any date in the plan year, including the first or last day of the plan year. Valuations must be performed within the period specified by Code section 431(c)(7) and ERISA section 304(c)(7).

Line 1b(1). Current Value of Assets. Enter the current value of assets as of the valuation date. The current value is the same as the fair market value. Do not adjust for items such as the existing credit balance or the outstanding balances of certain amortization bases. Contributions designated for 2019 should not be included in this amount. Note that this entry may be different from the entry in line 2a. Such a difference may result, for example, if the valuation date is not the first day of the plan year, or if insurance contracts are excluded from assets reported on line 1b(1) but not on line 2a.

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 1b(1), regardless of whether they are reported on the 2019 Schedule H (Form 5500) (line 11, column (a)) or Schedule I (Form 5500) (line 1c, column (a)). Additionally, asset and liability amounts must be determined in a consistent manner. Therefore, if the value of any insurance contracts have been excluded from the amount reported on line 1b(1), liabilities satisfied by such contracts should also be excluded from the liability values reported on lines 1c(1), 1c(2), and 1d(2) of the Schedule MB.

Line 1b(2). Actuarial Value of Assets. Enter the value of assets determined in accordance with Code section 431(c)(2) and ERISA section 304(c)(2). Do not adjust for items such as the existing credit balance or the outstanding balances of certain amortization bases, and do not include contributions designated for 2019 in this amount.

Line 1c(1). Accrued Liability for Immediate Gain Methods. Complete this line only if you use an immediate gain method (see Revenue Ruling 81-213, 1981-2 C.B. 101, for a definition of immediate gain method).

Lines 1c(2)(a), (b), and (c). Information for Plans Using Spread Gain Methods. Complete these lines only if you use a spread gain method (see Revenue Ruling 81-213 for a definition of spread gain method).

Line 1c(2)(a). Unfunded Liability for Methods with Bases. Complete this line only if you use the frozen initial liability or attained age normal cost method.

Lines 1c(2)(b) and (c). Entry Age Normal Accrued Liability and Normal Cost. For spread gain methods, these calculations are used for purposes of the full funding limitation (see Revenue Ruling 81-13, 1981-1 C.B. 229).

Line 1d(1). Amount Excluded from Current Liability. Leave line 1(d)(1) blank.

Line 1d(2)(a). Current Liability. All multiemployer plans, regardless of the number of participants, must provide the information indicated in accordance with these instructions. The interest rate used to compute the current liability must be in accordance with guidelines issued by the IRS and, pursuant to the Pension Protection Act of 2006 (PPA), must not be more than 5 percent above and must not be more than 10 percent below the weighted average of the rates of interest, as set forth by the Treasury Department, on 30-year Treasury securities during the 4-year period ending on the last day before the beginning of the 2019 plan year.

The current liability must be computed using the mortality tables referenced in section 1.431(c)(6)-1 of the Treasury Regulations.

Each other actuarial assumption used in calculating the current liability must be the same assumption used for calculating other costs for the funding standard account. See Notice 90-11, 1990-1 C.B. 319. The actuary must take into account rates of early retirement and the plan's early retirement and turnover provisions as they relate to benefits, where these would significantly affect the results. Regardless of the valuation date, current liability is computed taking into account only credited service through the end of the prior plan year. No salary scale projections should be used in these computations. Do not include the expected increase in current liability due to benefits accruing during the plan year reported on line 1d(2)(b) in these computations.

Line 1d(2)(b). Expected Increase in Current Liability. Enter the amount by which the current liability is expected to increase due to benefits accruing during the plan year on account of credited service and/or salary changes for the current year. One year's salary scale may be reflected.

Line 1d(2)(c). Expected Release From Current Liability for the Plan Year. Enter the expected release from current liability on account of disbursements (including single-sum distributions) from the plan expected to be paid after the valuation date but prior to the end of the plan year (see also Q&A-7 of Revenue Ruling 96-21, 1996-1 C.B. 64).

Line 1d(3). Expected Plan Disbursements. Enter the amount of plan disbursements expected to be paid for the plan year.

Line 2. All entries must be reported as of the beginning of the 2019 plan year. Lines 2a and 2b should include all assets and liabilities under the plan except for assets and liabilities attributable to: **(1)** rollover amounts or other amounts in individual accounts that are not available to provide defined benefits, or **(2)** benefits for which an insurer has made an irrevocable commitment as defined in 29 CFR 4001.2.

Line 2a. Current Value of Assets. Enter the current value of net assets as of the first day of the plan year. Except for plans with excluded assets as described above, this entry should be the same as reported on the 2019 Schedule H (Form 5500) (line 11, column (a)) or Schedule I (Form 5500) (line 1c, column (a)). Note that contributions designated for the 2019 plan year are not included on those lines.

Line 2b. Current Liability (beginning of plan year). Enter the current liability as of the first day of the plan year. Do not include the expected increase in current liability due to benefits accruing during the plan year. See the instructions for line 1d(2)(a) for actuarial assumptions used in determining current liability.

Column (1) – Enter the number of participants and beneficiaries as of the beginning of the plan year in each category (e.g., terminated vested participants). Enter "0" if no participants fall into the category. If the current liability figures are derived from a valuation that follows the first day of the plan year, the participant and beneficiary count entries should be derived from the counts used in that valuation in a manner consistent with the derivation of the current liability reported in column (2).

Column (2) – Enter the current liability attributable to all benefits, with subtotals for vested and nonvested benefits in the case of active participants. Enter "0" if there is no current liability attributable to a particular category of participants.

Line 2c. This calculation is required under ERISA section 103(d)(11). Do not complete if line 2a divided by line 2b(4), column (2), is 70% or greater.

Line 3. Contributions Made to Plan. Show all employer and employee contributions for the plan year. Include employer contributions made not later than 2½ months (or the later date allowed under Code section 431(c)(8) and ERISA section 304(c)(8)) after the end of the plan year. Show only contributions actually made to the plan by the date this Schedule MB is signed.

Add the amounts in both columns (b) and (c) and enter both results on the total line. All contributions must be credited toward a particular plan year.

If any of the contributions reported in line 3 include amounts owed for withdrawal liability, attach a list of withdrawal liability payments and the dates such amounts were contributed. Label this attachment **“Schedule MB, Line 3 – Withdrawal Liability Amounts.”**

Line 4. Information on Plan Status. All multiemployer plans regardless of the number of participants must provide the information indicated in accordance with these instructions.

Line 4a. All plans enter the funded percentage for monitoring the plan’s status. This is line 1b(2) divided by line 1c(3).

Line 4b. Enter the code for the status of the multiemployer plan for the plan year, as certified by the plan actuary, (or as elected by the plan sponsor in accordance with Code section 432(b)(4)(A) and ERISA section 305(b)(4)(A)) using one of the following codes:

Code	Plan Status
E	Endangered Status
S	Seriously Endangered Status
C	Critical Status
D	Critical and Declining Status
N	Not in Endangered or Critical Status

If the plan is certified to be in endangered status, seriously endangered status, critical status, or critical and declining status, attach a copy of the actuarial certification of such status to this Schedule MB. Also attach an illustration showing the details (including year-by-year cash flow projections demonstrating the solvency of the plan over the relevant period if the plan is certified as being in critical and declining status) providing support for the actuarial certification of status and label the illustration **“Schedule MB, line 4b – Illustration Supporting Actuarial Certification of Status.”** For example, if a plan is certified as being in critical status based on Code section 432(b)(2)(B), show the funded percentage (if applicable) and the projection of the funding standard account for the year in which the accumulated funding deficiency occurs. All supporting documentation should include descriptions of the assumptions used.

Line 4c. If, in the plan year in which the Schedule MB is filed, a certification was required to be made under Code section 432(b)(3)(A)(ii) and ERISA section 305(b)(3)(A)(ii) with respect to scheduled progress during the plan year for which the Schedule MB is filed, check “Yes” or “No” to reflect the certification. Attach documentation comparing the current status of the plan to the scheduled progress under the applicable funding improvement or rehabilitation plan to this Schedule MB. Label the documentation **“Schedule MB, line 4c – Documentation Regarding Progress Under Funding Improvement or Rehabilitation Plan.”**

Lines 4d and 4e. If Code C (Critical Status) or Code D (Critical and Declining Status) was entered on line 4b, an entry on line

4d is required. For purposes of lines 4d and 4e, in determining whether benefits have been reduced, only adjustable benefits that would otherwise be protected under Code section 411(d)(6) and ERISA section 204(g) are taken into account if the plan is certified as being in critical status. Plans that are certified as being in critical and declining status should determine whether benefits have been reduced, including all benefits that were adjusted (only adjustable benefits that would otherwise be protected under Code section 411(d)(6) and ERISA section 204(g) are taken into account), any benefits that have been suspended under Code section 432(e)(9), and any benefit reductions due to a partition under ERISA section 4233. For a plan that has benefits suspended under Code section 432(e)(9) and/or partitioned under ERISA section 4233, attach a full description of the transaction and label the attachment **“Schedule MB, Lines 4d and 4e – Description of Benefit Reductions Due to Suspension or Partition”**. In addition, only benefit reductions that are first reflected in line 1c(3) for the current year’s Schedule MB should be reported, and this amount should not include any amounts previously reported on any prior year’s Schedule MB.

Line 4f. If Code C (Critical Status) or Code D (Critical and Declining Status) was entered on line 4b you must complete line 4f as follows:

- If, under the terms of the most recently adopted rehabilitation plan, the plan is projected to emerge from critical status within 30 years, enter the plan year in which the plan is projected to emerge from critical status.
- If, under the terms of the most recently adopted rehabilitation plan, the plan is projected to become insolvent within 30 years, check the box provided, enter the plan year in which the insolvency is expected. In addition, attach an illustration showing year-by-year cash flow projections for the period ending with the year the plan is projected to become insolvent (or the 20th year after the valuation year if earlier) and a summary of the assumptions underlying the projections. Label this attachment **“Schedule MB, line 4f – Cash Flow Projections”**.
- If, under the terms of the most recently adopted rehabilitation plan, the plan is neither projected to emerge from critical status nor become insolvent within 30 years, check the box provided, enter the year of projected emergence or insolvency in the space for plan year (or “9999” if such year has not been determined). In addition, attach an illustration showing year-by-year cash flow projections ending with the 20th year after the valuation year and a summary of the assumptions underlying the projections. Label this attachment **“Schedule MB, line 4f – Cash Flow Projections”**.

Line 5. Actuarial Cost Method. Enter the primary method used. If the plan uses one actuarial cost method in one year as the basis of establishing an accrued liability for use under the frozen initial liability method in subsequent years, answer as if the frozen initial liability method was used in all years. The projected unit credit method is included in the “Accrued benefit (unit credit)” category of line 5c. If a method other than a method listed on lines 5a through 5g is used, check the box for line 5i and specify the method. For example, if a modified individual level premium method for which actuarial gains and losses are spread as a part of future normal cost is used, check the box for 5i and describe the cost method.

Check the appropriate box for the underlying actuarial cost method used as the basis for this plan year’s funding standard account computation. If box 5h is checked, enter the period of use of the shortfall method in line 5j. For this purpose, enter the calendar year (YY) which includes the

first day of the plan year in which the shortfall method was first used.

Changes in funding methods include changes in actuarial cost method, changes in asset valuation method, and changes in the valuation date of plan costs and liabilities or of plan assets. Changes in the funding method of a plan include not only changes to the overall funding method used by the plan, but also changes to each specific method of computation used in applying the overall method. Generally, these changes require IRS approval. If the change was made pursuant to Revenue Procedure 2000-40, 2000-2 C.B. 357, or pursuant to other automatic approval, check "Yes" for line 5l. If approval was granted for this plan by either an individual ruling letter or a class ruling letter, enter the date of the applicable ruling letter in line 5m. Note that the plan sponsor's agreement to certain changes in funding methods should be reported on line 8 of Schedule R (Form 5500).

Shortfall Method: Only certain plans may elect the shortfall funding method (see Treasury Regulations section 1.412(c)(1)-2). Advance approval from the IRS for the election of the shortfall method of funding is NOT required if it is first adopted for the first plan year to which Code section 412 applies. In addition, pursuant to PPA section 201(b), a plan does NOT need advance approval from the IRS to adopt or cease using the shortfall method if the plan (1) has not adopted or ceased using the shortfall method during the 5-year period ending on the day before the date the plan is to use the method, and (2) is not operating under an amortization period extension and did not operate under such an extension during such 5-year period. In such a case, check "Yes" for line 5l. If a plan utilizes this automatic approval to apply the shortfall method, the benefit increase limitations of Code section 412(c)(7) apply.

If a plan is not eligible for automatic approval as set forth in the preceding paragraph, advance approval from the IRS is required if the shortfall funding method is adopted at a later time, if a specific computation method is changed, or if the shortfall method is discontinued. In such a case there is no automatic limitation on benefit increases.

Line 6. Actuarial Assumptions. If gender-based assumptions are used in developing plan costs, enter those rates where appropriate in line 6. Note that requests for gender-based cost information do not suggest that gender-based benefits are legal. If unisex tables are used, enter the values in both "Male" and "Female" lines. Check "N/A" for line 6b if the question is not applicable.

Attach a statement of actuarial assumptions (if not fully described by line 6) and actuarial methods used to calculate the figures shown in lines 1 and 9 (if not fully described by line 5), and label the statement "**Schedule MB, line 6 – Statement of Actuarial Assumptions/Methods.**" The statement must describe all actuarial assumptions used to determine the liabilities. For example, the statement for non-traditional plans (e.g., cash balance plans) must include the assumptions used to convert balances to annuities.

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., eligibility frozen, service/pay frozen, benefits frozen), 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, an identification of benefits not included in the valuation (e.g., shutdown benefits), 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, a description (or

reasonably representative sample) of plan early retirement factors, and any change in actuarial assumptions or cost methods and justifications for any such change (see section 103(d) of ERISA). Label the summary "**Schedule MB, line 6 – Summary of Plan Provisions.**"

Also, include any other information needed to disclose the actuarial position of the plan fully and fairly, including the weighted average retirement age.

Line 6a. Current Liability Interest Rate. Enter the interest rate used to determine current liability. The interest rate used must be in accordance with the guidelines issued by the IRS and, pursuant to PPA, must not be more than 5 percent above and must not be more than 10 percent below the weighted average of the rates of interest, as set forth by the Treasury Department, on 30-year Treasury securities during the 4-year period ending on the last day before the beginning of the 2019 plan year. Enter the rate to the nearest .01 percent.

Line 6b. Check "Yes," if the rates in the contract were used (e.g., purchase rates at retirement).

Line 6c. Mortality Table. The mortality table published in section 1.431(c)(6)-1 of the Treasury Regulations must be used in the calculation of current liability for non-disabled lives. Enter the mortality table code for non-disabled lives used for valuation purposes as follows:

Mortality Table	Code
1951 Group Annuity.....	1
1971 Group Annuity Mortality (G.A.M.)	2
1971 Individual Annuity Mortality (I.A.M.)	3
UP-1984	4
1983 I.A.M.....	5
1983 G.A.M.	6
1983 G.A.M. (solely per Revenue Ruling 95-28)	7
UP-1994	8
Mortality table applicable to current plan year under section 1.431(c)(6)-1 of the Income Tax Regulations	9
RP-2000.....	10
RP-2000 (with Blue Collar Adjustment).....	11
RP-2014.....	12
RP-2014 (Blue Collar).....	13
RP-2014 (adjusted to 2006 Base Year).....	14
Other	A
None	0

Code 6 includes all sex-distinct versions of the 1983 G.A.M. table other than the table published in Revenue Ruling 95-28, 1995-1 C.B. 74. Thus, for example, Code 6 also would include the 1983 G.A.M. male-only table used for males, where the 1983 G.A.M. male-only table with a 6-year setback is used for females. Code A includes mortality tables other than those listed in Codes 1 through 9, including any unisex version of the 1983 G.A.M. table.

Where an indicated table consists of separate tables for males and females, add F to the female table (e.g., 1F). When a projection is used with a table, follow the code with "P" and the year of projection (omit the year if the projection is unrelated to a single calendar year). The identity of the projection scale should be omitted from line 6c, but a

description of projection techniques, including the projection scales used, should be included in the **Schedule MB, line 6 – Statement of Actuarial Assumptions/Methods**. When an age setback or set forward is used, indicate with “-” or “+” and the number of years. For example, if for females the 1951 Group Annuity Table with Projection C to 1971 is used with a 5-year setback, enter “1P71-5.” If the table is not one of those listed, enter “A” with no further notation. If the valuation assumes a maturity value to provide the post-retirement income without separately identifying the mortality, interest and expense elements, enter on line 6c, under “Post-retirement,” the value of \$1.00 of monthly pension beginning at the plan’s weighted average retirement age, assuming the normal form of annuity for an unmarried person. In such a case, leave lines 6d and 6e blank.

Line 6d. Valuation Liability Interest Rate. Enter the assumption as to the expected interest rate (investment return) used to determine all the calculated values except for current liability. If the assumed rate varies with the year, enter the weighted average of the assumed rate for 20 years following the valuation date. Enter rates to the nearest .01 percent.

Line 6e. Expense Loading. If there is no expense loading, check the “N/A” boxes under “Pre-retirement” and “Post-retirement”. For instance, there would be no expense loading attributable to investments if the rate of investment return on assets is adjusted to take investment expenses into account. If there is a single expense loading not separately identified as pre-retirement or post-retirement, enter it under “Pre-retirement” and check the “N/A” box under “Post-Retirement.” Where expenses are assumed other than as a percentage of plan costs or liabilities, enter the assumed pre-retirement expense as a percentage of the plan’s normal cost, and enter the post-retirement expense as a percentage of plan liabilities. If the normal cost of the plan is zero, enter the assumed pre-retirement expense as a percentage of the sum of lines 9c(1), 9c(2), and 9c(3), minus line 9h. Enter rates to the nearest .1 percent.

Line 6f. Salary Scale. If a uniform level annual rate of salary increase is used, enter that annual rate. Otherwise, enter the level annual rate of salary increase that is equivalent to the rate(s) of salary increase used. Enter the annual rate as a percentage to the nearest .01 percent, used for a participant from age 25 to assumed retirement age. If the plan’s benefit formula is not related to compensation, check the “N/A” box.

Line 6g. Estimated Investment Return – Actuarial Value. Enter the estimated rate of return on the actuarial value of plan assets for the 1-year period ending on the valuation date. For this purpose, the rate of return is determined by using the formula $2I/(A + B - I)$, where I is the dollar amount of the investment return under the asset valuation method used for the plan, A is the actuarial value of the assets one year ago, and B is the actuarial value of the assets on the current valuation date. Enter rates to the nearest .1 percent. If entering a negative number, enter a minus sign (“-”) to the left of the number.

Note. Use the above formula even if the actuary feels that the result of using the formula does not represent the true estimated rate of return on the actuarial value of plan assets for the 1-year period ending on the valuation date. The actuary may attach a statement showing both the actuary’s estimate of the rate of return and the actuary’s calculations of that rate, and label the statement “**Schedule MB, line 6g – Estimated Rate of Investment Return (Actuarial Value).**”

Line 6h. Estimated Investment Return – Current (Market) Value. Enter the estimated rate of return on the current value

of plan assets for the 1-year period ending on the valuation date. (The current value is the same as the fair market value — see line 1b(1) instructions.) For this purpose, the rate of return is determined by using the formula $2I/(A + B - I)$, where I is the dollar amount of the investment return, A is the current value of the assets one year ago, and B is the current value of the assets on the current valuation date. Enter rates to the nearest .1 percent. If entering a negative number, enter a minus sign (“-”) to the left of the number.

Note. Use the above formula even if the actuary feels that the result of using the formula does not represent the true estimated rate of return on the current value of plan assets for the 1-year period ending on the valuation date. The actuary may attach a statement showing both the actuary’s estimate of the rate of return and the actuary’s calculations of that rate, and label the statement “**Schedule MB, line 6h – Estimated Rate of Investment Return (Current Value).**”

Line 7. New Amortization Bases Established. List all new amortization bases established in the current plan year (before the combining of bases, if bases were combined). Use the following table to indicate the type of base established, and enter the appropriate code under “Type of base.” List amortization bases and charges and/or credits as of the valuation date. Bases that are considered fully amortized because there is a credit for the plan year on line 9j(3) should be listed. If entering a negative number, enter a minus sign (“-”) to the left of the number.

Code	Type of Amortization Base
1	Experience gain or loss
2	Shortfall gain or loss
3	Change in unfunded liability due to plan amendment
4	Change in unfunded liability due to change in actuarial assumptions
5	Change in unfunded liability due to change in actuarial cost method
6	Waiver of the minimum funding standard
7	Initial unfunded liability (for new plan)
8	Net investment loss incurred in either of the first two plan years ending after August 31, 2008

Line 8a and 8d. Funding Waivers or Extensions. If a funding waiver or extension request is approved after the Schedule MB is filed, an amended Schedule MB must be filed with Form 5500 to report the waiver or extension approval (also see instructions for line 9k(1)).

Line 8b(1). Schedule of Projection of Expected Benefit Payments. Check “Yes” only if this is a multiemployer plan covered by Title IV of ERISA that has 500 or more total participants as of the valuation date.

If line 8b(1) is “Yes,” in an attachment, provide a projection of benefits expected to be paid for the entire plan (not to include expected expenses) in each of the next ten years starting with the current plan year of this filing assuming (1) no additional accruals, (2) experience (e.g., termination, mortality, and retirement) are in line with valuation assumptions, and (3) no new entrants are covered by the plan. Use the format shown below and label the schedule “**Schedule MB, line 8b(1) – Schedule of Projection of Expected Benefit Payments**”.

Schedule MB, line 8b(1) – Schedule of Projection of Expected Benefit Payments	
Plan Year	Expected Annual Benefit Payments
Current Plan Year	
Current Plan Year +1	
Current Plan Year +2	
Current Plan Year +3	
Etc.	
Current Plan Year +9	

Line 8b(2). Schedule of Active Participant Data. Check “Yes” only if this is a multiemployer plan covered by Title IV of ERISA that has active participants.

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. In general, data to be shown in each age/service 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, using \$0 for anyone who has no cash balance account-based benefit.

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

Schedule MB, line 8b(2) – 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												

If line 8b(2) is “Yes,” attach a schedule of the active plan participant data used in the valuation for this plan year. Use the format shown above and label the schedule “**Schedule MB, line 8b(2) – 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 2b(3)(c), column (1), and using compensation to determine benefits 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.

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 2b(3)(c), column (1), must also provide average cash balance account data, regardless of whether all active participants have cash balance accounts.

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.

In lieu of the above, two alternatives are provided for showing compensation and cash balance accounts. Each alternative provides for two age/service scatters (one showing compensation and one showing cash balance accounts) as follows:

Alternative A:

- Scatter 1 - Provide participant count and average compensation for *all* active participants, whether or not participants have account-based benefits.
- Scatter 2 - Provide participant count and average cash balance account for *all* active participants, whether or not participants have account-based benefits.

Alternative B:

- Scatter 1 - Provide participant count and average compensation for *all* active participants, whether or not participants have account-based benefits (i.e., identical to Scatter 1 in Alternative A).
- 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 more than 20 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.

Line 9. Shortfall Method. Under the shortfall method of funding, the normal cost in the funding standard account is the charge per unit of production (or per unit of service) multiplied by the actual number of units of production (or units of service) that occurred during the plan year. Each amortization installment in the funding standard account is similarly calculated.

Lines 9c and 9h. Amortization Charges and Credits. If there are any amortization charges or credits, attach a maintenance schedule of funding standard account bases and label the schedule “**Schedule MB, lines 9c and 9h – Schedule of Funding Standard Account Bases.**” The attachment should clearly indicate the type of base (i.e., original unfunded liability, amendments, actuarial losses, etc.), the outstanding balance of each base, the number of years remaining in the amortization period, and the amortization amount. If bases were combined in the current year, the attachment should show information on bases both prior to and after the combining of bases.

The outstanding balance and amortization charges and credits must be calculated as of the valuation date for the plan year.

Line 9c(3) should only include information related to the amortization bases extended and amortized using the interest rate under section 6621(b) of the Code.

Line 9d. Interest as Applicable. Interest as applicable should be charged to the last day of the plan year.

Line 9f. Note that the credit balance or funding deficiency at the end of “Year X” should be equal to the credit balance or funding deficiency at the beginning of “Year X+1.” If such credit balances or funding deficiencies are not equal, attach an explanation and label the attachment “**Schedule MB, line 9f – Explanation of Prior Year Credit Balance/Funding Deficiency Discrepancy.**” For example, if the difference is because contributions for a prior year that were not previously reported are received this plan year, attach a listing of the amounts and dates of such contributions. As another example, if the difference is due to the application of funding relief under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (PRA 2010), Pub. L. No. 111-192, the attachment should show how the information on the Schedule MB filed for any previous plan year would have differed if it had reflected application of the special funding relief in accordance with published guidance (to the extent that the plan sponsor has applied the special funding relief).

Line 9j(1). ERISA Full Funding Limitation. Instructions for this line are reserved pending published guidance.

Line 9j(2). “RPA ’94” Override. Instructions for this line are reserved pending published guidance.

Line 9j(3). Full Funding Credit. Enter the excess of (1) the accumulated funding deficiency, disregarding the credit balance and contributions for the current year, if any, over (2) the greater of lines 9j(1) or 9j(2).

Line 9k(1). Waived Funding Deficiency Credit. Enter a credit for a waived funding deficiency for the current plan year (Code section 431(b)(3)(C)). If a waiver of a funding deficiency is pending, report a funding deficiency. If the waiver is granted after Form 5500 or Form 5500-SF is filed, file an amended Form 5500 or Form 5500-SF, as applicable, with an amended Schedule MB to report the funding waiver (see *Amended Return/Report* in the instructions for Form 5500 or *line B – Box for Amended Return/Report* in the instructions for Form 5500-SF, as applicable).

Line 9k(2). Other Credits. Enter a credit in the case of a plan for which the accumulated funding deficiency is determined under the funding standard account if such plan year follows a plan year for which such deficiency was determined under the alternative minimum funding standard.

Line 9o. Reconciliation Account. The reconciliation account is made up of those components that upset the balance equation of Treasury Regulations section 1.412(c)(3)-1(b). Valuation assets must not be adjusted by the reconciliation account balance when computing the required minimum funding.

Line 9o(1). This amount is equal to the prior year’s accumulated reconciliation amount due to prior waived funding deficiencies, increased with interest at the valuation rate to the current valuation date.

Line 9o(2)(a). If an amortization extension is being amortized at an interest rate that differs from the valuation rate, enter the prior year’s “reconciliation amortization extension outstanding balance,” increased with interest at the valuation interest rate to the current valuation date, and decreased by the year end amortization amount based on the amortization interest rate from the prior plan year.

Line 9o(3). Enter the sum of lines 9o(1) and 9o(2)(b) (each adjusted with interest at the valuation rate to the current valuation date, if necessary).

Note. The net outstanding balance of amortization charges and credits minus the prior year’s credit balance minus the amount on line 9o(3) (each adjusted with interest at the valuation rate, if necessary) must equal the unfunded liability.

Line 10. Contribution Necessary to Avoid Deficiency. Enter the amount from line 9n. If applicable, file IRS Form 5330, Return of Excise Taxes Related to Employee Benefit Plans, with the IRS to pay the excise tax on the funding deficiency. There is a penalty for not filing the Form 5330 on time.

Line 11. In accordance with ERISA section 103(d)(3), attach a justification for any change in actuarial assumptions for the current plan year and label the attachment “**Schedule MB, line 11 – Justification for Change in Actuarial Assumptions.**”