

***Pension Coding Program  
Users Guide***

**User Guide**

Helena Stolyarova  
Michael Nolte  
Bob Peticolas

Survey Research Center  
Institute for Social Research  
University of Michigan  
Ann Arbor, Michigan

**July 2005**

**Funding**

The Health and Retirement Study is funded by a grant from the National Institute on Aging (U01 AG009740) with supplemental support from the Social Security Administration. HRS is conducted by the University of Michigan.

**Suggested Citation**

Stolyarova, H., Nolte, M & Peticolas, B. (2005). Pension Coding Program Users Guide. University of Michigan. <https://hrs.isr.umich.edu/publications/biblio/8909>

|                                                                     |    |
|---------------------------------------------------------------------|----|
| INTRODUCTION.....                                                   | 4  |
| GENERAL BACKGROUND .....                                            | 5  |
| TYPES OF PLANS .....                                                | 5  |
| Defined Benefit vs. Defined Contribution.....                       | 5  |
| Combination Plans.....                                              | 5  |
| Contributory vs. Non-contributory Plans .....                       | 5  |
| SPECIFIC TYPES OF PLANS .....                                       | 5  |
| Cash Balance Plan .....                                             | 5  |
| Money Purchase Plans.....                                           | 6  |
| Profit Sharing Plan.....                                            | 6  |
| Target Benefit Plans.....                                           | 6  |
| 401-k Plans .....                                                   | 6  |
| Simplified Employee Pensions .....                                  | 7  |
| Employee Stock Ownership Plans.....                                 | 7  |
| Keough Plans.....                                                   | 7  |
| GENERAL INSTRUCTIONS .....                                          | 8  |
| Discontinued Plan Provisions .....                                  | 8  |
| Form of Payment .....                                               | 8  |
| Provisions that are Specific to Job Characteristics.....            | 8  |
| Timing of Benefit Payments .....                                    | 8  |
| Missing Information.....                                            | 9  |
| Pension Provider Identification .....                               | 9  |
| Main Menu Items .....                                               | 10 |
| The Plan Look-up Form .....                                         | 11 |
| Plan Organization .....                                             | 12 |
| VARIABLES, QUALIFICATIONS AND FORMULAS .....                        | 14 |
| Actual Service Years (ASY) .....                                    | 14 |
| Final Average Pay (FAP).....                                        | 18 |
| Mandatory Contributions in a DB Plan (MAN).....                     | 24 |
| Voluntary Contributions in a DB plan (VOL).....                     | 30 |
| Potential Years of Service (PSY) .....                              | 36 |
| Social Security (SS).....                                           | 39 |
| Reduction Factors (RED) .....                                       | 45 |
| Age & Service Requirements (RAS) .....                              | 47 |
| Date Restrictions (DAT).....                                        | 48 |
| Other Requirements (ROT) .....                                      | 49 |
| Annuity Length (LNG).....                                           | 50 |
| Annuity Begins (BEG).....                                           | 51 |
| Retirement Formulas .....                                           | 52 |
| General Guidelines .....                                            | 52 |
| Normal Retirement (NR) and Early Retirement (ER).....               | 54 |
| Vested Deferred Retirement (VD).....                                | 55 |
| Disability Retirement (DR) and Death & Survivor (DS) Formulas. .... | 56 |
| Plan Information .....                                              | 57 |
| Cost of Living Adjustment (COLA) .....                              | 63 |
| Late Retirement (LR) .....                                          | 66 |
| Special Provisions .....                                            | 69 |
| Vesting.....                                                        | 76 |

|                                                   |     |
|---------------------------------------------------|-----|
| Payouts.....                                      | 81  |
| Mandatory Contributions in a DC plan (MANDC)..... | 86  |
| Match of Mandatory Contribution (MMAN).....       | 93  |
| Voluntary Contribution in a DC plan (VOLDC) ..... | 102 |
| Match of Voluntary Contributions (MVOL).....      | 113 |
| Other Employer Contributions (COE).....           | 122 |
| Profit Sharing and ESOP Plans (CTE) .....         | 134 |
| Lump Sum Contributions (CLS) .....                | 149 |
| APPENDIX .....                                    | 159 |



## INTRODUCTION

This reference manual serves as a companion document to the coding instruments used for the pension provider component of the Health and Retirement Study. This manual serves two purposes. First, it provides detailed guidance to the coders responsible for completing the coding instrument based on summary plan descriptions (SPDs) and (occasionally) other documents. Second, for the benefit of members of the research community who analyze these data, this document clarifies the nature of the information collected.

The organization of this manual is as follows. First, certain general guidelines for interpreting and coding information provided by SPDs are set forth. Then there follows: specific question-by-question instructions on how to complete each element of the instrument. The remainder of the document is organized as follows:

The General Background section explains the broad categories of pensions, defined benefit and defined contribution plans. It further details the types and characteristics of specific plan types.

The General Instructions section provides guidance on a variety of pension plan issues that are not easily addressed in the more specific sections that follow.

The Application Description discusses each part of the application. These include:

- **Variable Definitions:** the Variable Definition section describes the definition of variables to be used in benefit formulas. This section describes each variable type and the meaning of each related question.
- **Qualification Definitions:** the Qualification Definition section describes each of the different qualification types used to determine whether a participant is eligible for a benefit at a particular age or with a particular service history.
- **Formula Section:** the Formula section describes the conventions used to enter benefit formulas. Note that both the Variable Definitions and the Qualification Definitions must be complete before the Formulas section is completed.
- **Miscellaneous Other Provisions:** the Other Provisions section describes miscellaneous other information the Pension Analyst captures, including cost of living adjustments, special provisions in case of death or disability, vesting, and information on related respondents.

## **GENERAL BACKGROUND**

### **TYPES OF PLANS**

#### Defined Benefit vs. Defined Contribution

A defined benefit plan represents a promise by the employer to provide a specific monetary benefit to the employee at retirement. A defined contribution plan only defines the level of funding for the plan in each plan year. The distinction is that for defined contribution plans, the employee bears the investment risk, while for defined benefit plans, the employer bears that risk.

#### Combination Plans

Occasionally, a plan is a hybrid of a defined benefit and a defined contribution plan. For instance, in the middle of a defined contribution plan, a paragraph may read: “In no event will the annuity from this defined contribution plan be less than \$10 per month for each year of service the participant accrues.” Such a provision will require a cross reference in the formula to a variable defined in another Part of the plan. For instance the provision above may appear in a normal retirement total formula as:

$$\text{MAX}(\text{NR\#1 OR CNRT\#1})$$

When this sort of cross-reference occurs, the plan is termed a “combination” plan, because it has elements of both a defined benefit and a defined contribution plan.

#### Contributory vs. Non-contributory Plans

A plan in which the employer pays all costs of the plan is called a non-contributory plan. A plan in which the employee pays for all or part of the cost of the plan is called a contributory plan. Note that this distinction is independent of whether the plan is a defined benefit or defined contribution plan.

### **SPECIFIC TYPES OF PLANS**

There are many types of plans, and as part of the survey, you are often asked to specify what type of plan is involved. To better enable you to answer this question, short description of the common types of defined contribution plans follow:

#### Cash Balance Plan

This plan is legally a defined benefit plan but it looks and feels like a defined contribution plan, so it will be coded as such in this study. The employer allocates a contribution annually to employees, and interest is paid on the balance. The interest can be a fixed rate or the interest may vary with a recognized market rate.

### Money Purchase Plans

This plan is somewhat similar to a Cash Balance plan, but it is legally a defined contribution plan. In a money purchase plan, the employer's annual contribution is determined by a specific formula, often a percentage of compensation or a flat dollar amount. This formula may take into account past service, and is permitted to be integrated with social security.

### Profit Sharing Plan

A profit sharing plan bases its contributions on some measure of company performance, such as gross profits, net profits, or sales. There may be a specific formula for deriving the aggregate contribution or the contribution may be discretionary, with no definite formula cited.

The aggregate contribution is then allocated to participant accounts, usually on the basis of salary or wages. Forfeitures from profit sharing plans are either used to reduce the subsequent year employer contribution or are reallocated to the remaining employees.

### Target Benefit Plans

Target Benefit Plans are very similar to defined benefit plans. These plans are designed to provide a specific level of benefits at retirement. The important difference is that target benefit plans do not guarantee that level of benefits. That is, the plan's actuarial assumptions are not adjusted to reflect the performance of investment accounts in prior years. Although there is no guarantee, the benefit formula should represent the expected value of benefits at retirement. This type of plan provides the employee many of the advantages of a defined benefit plan without the corresponding administrative difficulties for the employer.

### 401-k Plans

These plans are referred to as cash or deferred arrangements (CODAs). Under these plans, an employee can elect to have his compensation reduced. The amount of the reduction is placed in an account for the employee. The income forgone is not reportable for federal tax purposes until the employee receives a distribution from the plan.

These plans are designed to be used by for profit organizations. Non-profits and governmental organizations have similar plans. These are 403-b plans and 457 plans.

Notice that these plans may be linked to profit sharing plans in for profit organizations. For instance, plan provisions may state that the board of directors at the end of the year may match some percentage of employees' contributions, depending on the profitability of the firm. In such

a case, the voluntary contribution would be a 401-k, and the matching contribution would be a profit sharing plan.

### Simplified Employee Pensions

Simplified Employee Pensions (SEPs) allow an employer to provide for employees' retirement benefits by contributing directly to the employees' Individual Retirement Accounts (IRAs). This (as the name suggests) is the simplest plan from an administrative perspective. It is generally used by smaller employers.

### Employee Stock Ownership Plans

Employee stock ownership plans (ESOPs or LESOPs) allow the employer to purchase the firm's shares and distribute these shares to its employees. This kind of plan is distinct from employee stock purchase plans, in which the employees purchase shares in the firm, often at a discounted price. There is generally no penalty for the pre-retirement sale of shares acquired in an Employee Stock Purchase plans. Therefore, they should not be coded as a pension plan. With ESOPs or LESOPs, the employer pays the entire cost of the shares, and the accounts are meant to enhance retirement benefits.

### Keough Plans

A self-employed person may arrange a Keough plan, which covers the self-employed individual and her employees. The Keough can be a defined contribution or a defined benefit plan, though defined contribution plans are more common. Keough plans are limited to unincorporated self-employed individuals, and are often used by professionals.

## **GENERAL INSTRUCTIONS**

### Discontinued Plan Provisions

Often, plan provisions which are no longer in force affect the benefits that plan participants will eventually receive. For example, an SPD may state that the current plan replaces an old plan that was ended several years ago. The SPD may guarantee that participants in the current plan will receive benefits that are not less than they would have received under the old plan.

Most of the questions in the instrument are phrased in the present tense; i.e., "does the plan have" various provisions in terms of eligibility formulas, benefit formulas, and so forth. This phrasing notwithstanding, in principle all plan provisions, current or discontinued, that potentially affect benefits paid should be coded to the extent possible. As the discussion of specific questions below makes clear, there are many places in which the instrument has been especially designed to facilitate the coding of discontinued plan provisions.

Sometimes service credit accrues under the old plan, but the method under which it is accrued is not described. In this situation, for the years covered under the previous plan, accrue ASY under the method for the present plan.

### Form of Payment

Except as instructed under death benefits, formulas should be coded under the assumption that benefits will be paid as a single-life annuity; i.e., payments of equal dollar amounts are made for the life of the retired participant and end upon his/her death.

### Provisions that are Specific to Job Characteristics

Occasionally, an SPD will state that different provisions will apply to different categories of participants. For example, salespersons may be subject to a minimum benefit formula that is not applied to others, or vesting schedules may be different for employees stationed at different sites. In such cases see a supervisor for further instructions.

### Timing of Benefit Payments

At several places within the instrument, there are questions concerning whether benefit payments commence immediately upon some event (e.g., disablement, retirement, death), as opposed to being deferred to a later time (e.g., the attainment of a certain age). If an SPD states that there may be a short delay (e.g., two months) before payments begin in order to allow for the processing of paperwork, we will regard this as a case of "immediate" onset of payments.

### Social Security Terms

Social Security is a government-sponsored pension for people who have reached at least age 62, which is considered early retirement age under Social Security. Normal retirement age is currently 65, but that will move to 67 over the next several years. A “Reduced” benefit refers to an early retirement benefit under Social Security. An unreduced benefit refers to the benefit available to the respondent at normal Social Security retirement age. This benefit is funded by a Payroll tax.

The Social Security Wage Base (SSWB) is the maximum amount of compensation on which an individual pays Social Security tax. The SSWB in recent years has been:

|      |          |
|------|----------|
| 1999 | \$72,600 |
| 1998 | \$68,400 |
| 1997 | \$65,400 |
| 1996 | \$62,700 |
| 1995 | \$61,200 |
| 1994 | \$60,600 |
| 1993 | \$57,600 |

Private defined contribution plans often use this Social Security Wage Base amount as a breakpoint in calculating contributions; however, rather than explicitly referring to the SSWB, the plan often simply cites the SSWB for the current year. If the plan refers to one of the amounts corresponding to the effective year of the plan, assume that the related breakpoint represents the SSWB. For example, a plan last amended in 1998 states that it contributes 5% of salary up to \$68,400, and 7% of salary for pay over \$68,400. Rather than coding the \$68,400 as an invariant dollar amount, code it as the SSWB.

### Missing Information

All questions are to be answered, unless the instructions concerning skip patterns specifically indicate that a question is to be skipped. If the SPD does not provide sufficient information to answer a question, use "NOT CITED" options where provided, or contact a supervisor if there is no “NOT CITED” option.

### Pension Provider Identification

Each file contains information about one pension provider and about each HRS respondent covered by a plan from this provider.

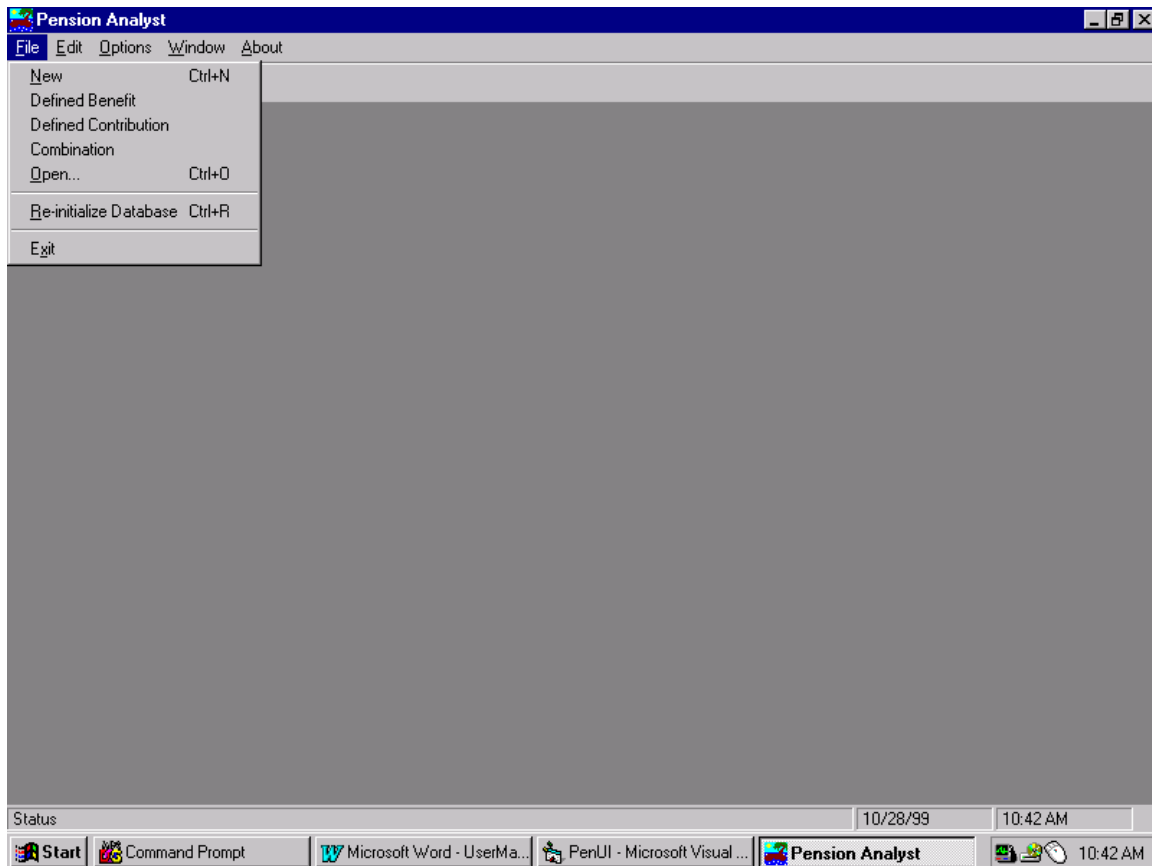
If a pension provider sponsors more than one pension plan, it is critically important to determine which plan(s) our respondent participates in. The respondent information sheet is designed to help determine this. It contains information such as job title, whether the job is union or non-union, whether the respondent describes their pay as a salary or wage. Carefully read the eligibility sections of the Summary Plan Descriptions to determine which plans are applicable to our respondents. If, after reviewing this information, there is any question which plan a respondent participates in, contact a supervisor. If it seems that a plan sponsored by the pension provider is missing from the file, and that plan might cover one of our respondents, contact a supervisor. There may still be an opportunity to obtain the plan.

The plan number is a three-digit number used by the pension provider to identify a plan to the Department of Labor. That number for a pension provider with one plan is generally 001. Governmental units, and some non-profit organizations are not required to report to the Department of Labor, and do not have a plan number. If you do not find a plan number, you should arbitrarily assign plan numbers starting with 999, and decrementing by one for each additional plan. So a state sponsoring three pension plans would have plan numbers 999, 998, and 997.

### Main Menu Items

The first four file options enable the user to start a new pension plan. “New” simply brings up a selection form enabling the user to start a defined benefit, a defined contribution or combination plan. This option is triggered when the new document icon on the toolbar is pressed. The “Defined Benefit”, “Defined Contribution”, and “Combination” options start a new pension plan of the selected type. The “Open” option brings up a list of pension plans currently stored in the database. This option is triggered when the open file icon on the toolbar is pressed.

The “Re-initialize Database” option allows the user to start with a fresh database containing no pension plans. This option should only be used once the database is backed up, and the related plans have been submitted for review.



The “Edit” item supports Windows Cut, Copy, and Paste functions. These options may prove useful when a second lengthy formula is very similar to the first, with only a minor change.

The “Options” item allows the user to turn the display of the status bar and the toolbar on and off.

The “Window” item allows the user to switch from one open window to another.

The “About” option contains information about the version number of this application and certain system information for the host machine.

### The Plan Look-up Form

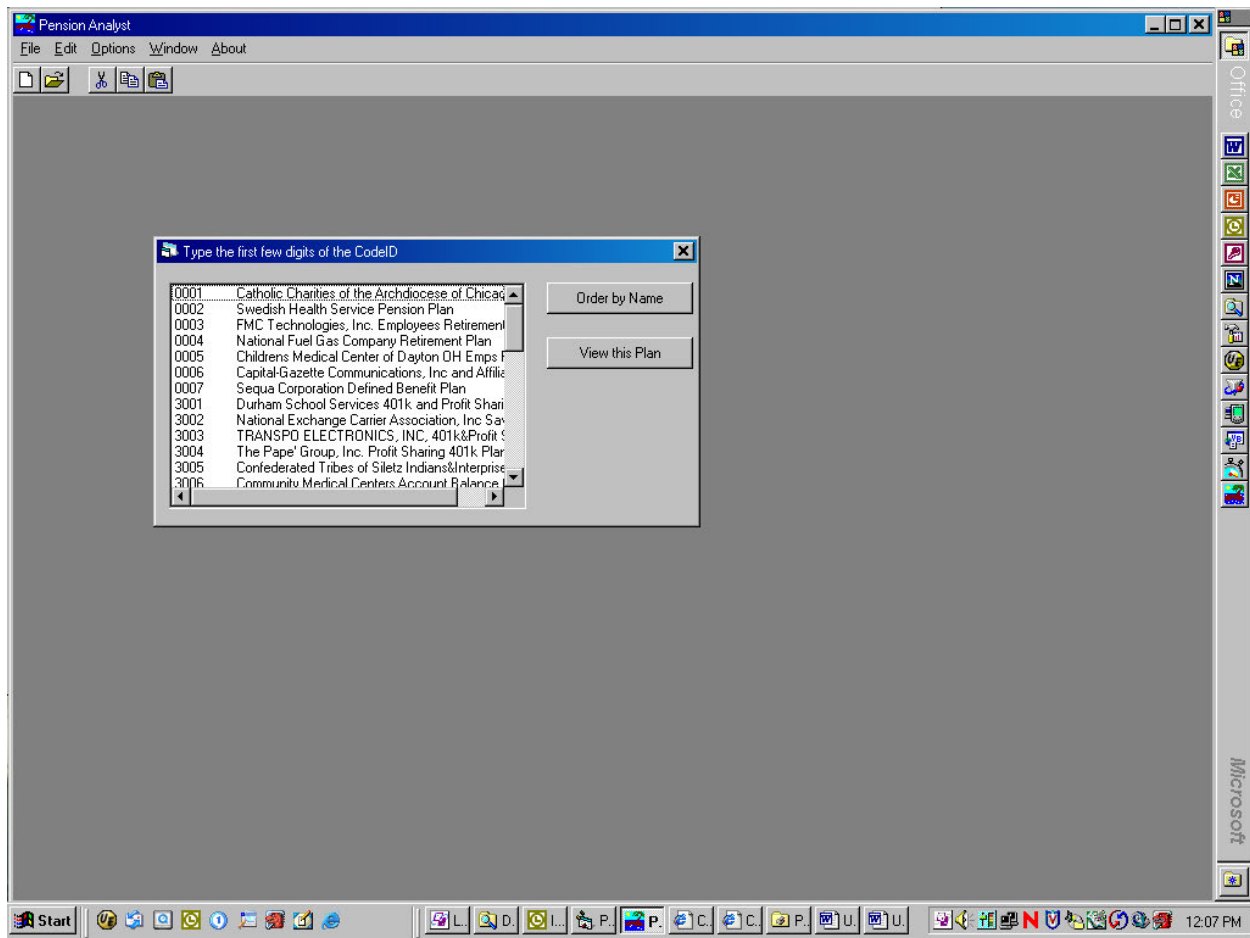
When the user chooses “Open” from the file menu, or presses the file folder on the toolbar, the Plan Look-up form is displayed. The existing plans in the database are displayed and can be ordered alphabetically by name or by CodeID.

To open an existing plan, highlight that plan with the cursor, and press the “View this Plan” button.

There are two other functions available on this form. A plan may be deleted by highlighting and pressing the delete key. Once deleted, there is no way to retrieve the plan, so use this function



judiciously. A plan may be copied by selecting Edit-Copy from the menu or by holding down both the Ctrl key and the “C” key. An analyst may want to copy a plan when the provisions are nearly identical for two plans.



## Plan Organization

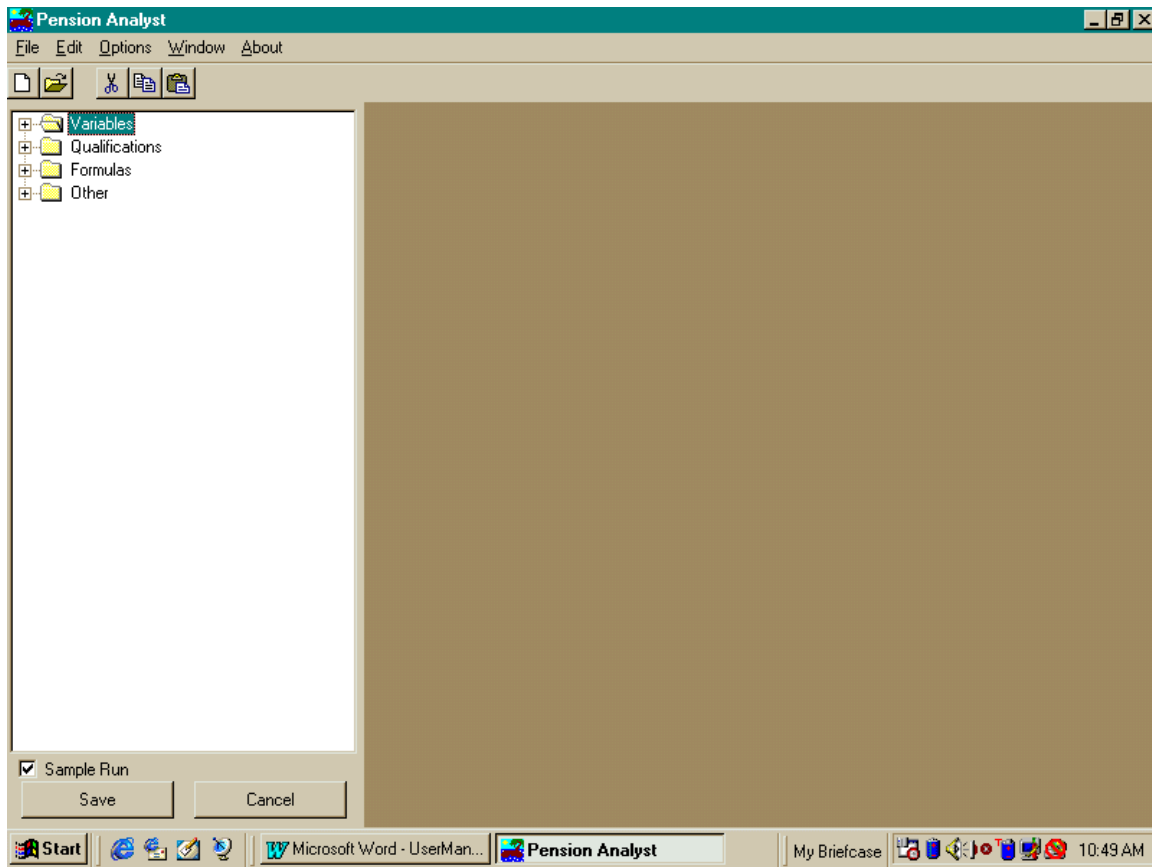
Defined Benefit and Defined Contribution plans follow the same organizational structure (the screen shot below is from a Defined Benefit plan).

The Variable Definition section describes the definition of variables to be used in benefit formulas. A variable must be defined before it can be used in a formula.

The Qualification Definition section describes each of the different qualification types used to determine whether a participant is eligible for a benefit at a particular age or with a particular service history. All related qualifications must be defined before they can be used in a formula.

The Formula section describes the actual benefit formulas used to calculate pensions.

The Other Provisions section describes miscellaneous other information the Pension Analyst captures, including cost of living adjustments, special provisions in case of death or disability, vesting, and information on related respondents.



# VARIABLES, QUALIFICATIONS AND FORMULAS

## Actual Service Years (ASY)

Actual Service Years is used for two purposes. The first is to define the actual years that will be included for purposes of actually calculating a pension benefit. The second (and sometimes different) definition involves which years of service will count towards vesting.

A plan often limits the number of years used by counting only years after a certain age or after a certain tenure has been reached. For instance it is common for a plan to count only years after age 21 and one year of service. In that case, the fifth option would be checked and the boxes filled in accordingly.

Ignore provisions for a break in service. Assume that the employee in question has been employed continuously since his/her date of hire.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The 'Actual Service Years (ASY)' dialog box is open, showing 'ASY Number: 1' and a 'Description' field. Below these are tabs for 'How Defined', 'Maximum', 'Hours Worked', and 'Dates'. The 'How Defined' tab is selected, displaying a question: 'C1. Do any of the benefit formulas or eligibility requirements depend on the employee's actual years of credited service?'. There are six radio button options with associated input fields for Age and # Years: 1. 'All Years of Employment are Credited' (selected), 2. 'Only Count Years After' (Age: [ ]), 3. 'Only Count Years After First # Years: [ ]', 4. 'Only Count Years After OR After First' (Age: [ ], # Years: [ ]), 5. 'Only Count Years After AND After First' (Age: [ ], # Years: [ ]), and 6. 'Only Count Years During Final # Years: [ ]'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', and 'Close' buttons. The main window has a menu bar (File, Edit, Options, Window, About) and a toolbar. The taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:50 AM.

Plans sometimes limit the maximum number of years that can be used. Perhaps because of age discrimination concerns, these limits are rarely seen, but still occasionally occur.

The screenshot shows the 'Pension Analyst' software window. On the left is a 'Variables' tree with folders for 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The 'Actual Service Years (ASY)' folder is expanded, showing a sub-item 'ASY1'. Below the tree are 'Sample Run' (checked), 'Save', and 'Cancel' buttons. The main area is titled 'Actual Service Years (ASY) [Plan: (new)]'. It has fields for 'ASY Number: 1' and 'Description:'. Below these are tabs for 'How Defined', 'Maximum', 'Hours Worked', and 'Dates'. The 'Maximum' tab is active, displaying the question: 'C2. Is there a maximum number of actual years of credited service or maximum age that can be used in calculating any of the benefits?'. There are six radio button options: 'Yes, Maximum' (with 'Age:' and 'ASY:' input fields), 'Yes, Maximum' (with 'Age plus ASY:' input field), 'Yes, When Over Maximum AGE: OR Over Maximum' (with 'Age:' and 'ASY:' input fields), 'Yes, When Over Maximum AGE: AND Over Maximum' (with 'Age:' and 'ASY:' input fields), and 'No'. At the bottom are 'Add', 'Edit', 'Delete', and 'Close' buttons, along with navigation arrows. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:50 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

Sample Run (checked)

Save Cancel

**Actual Service Years (ASY) [Plan: (new)]**

ASY Number: 1 Description:

How Defined Maximum Hours Worked Dates

**C2. Is there a maximum number of actual years of credited service or maximum age that can be used in calculating any of the benefits?**

☐ Yes, Maximum Age: ASY:

☐ Yes, Maximum Age plus ASY:

☐ Yes, When Over Maximum AGE: OR Over Maximum Age: ASY:

☐ Yes, When Over Maximum AGE: AND Over Maximum Age: ASY:

☐ No

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:50 AM

Plans often do not intend to cover part-time or seasonal workers, so they require some minimum threshold of work before they will count a year. For instance a plan may require an employee to work 1,600 hours before they will count the year as a year of service for pension purposes. If working less than 1,600 hours results in no service counted, the second option would be checked and “1600” would be entered in the first text box.

If a plan states that the employee must be employed in each month but specifies no minimum hours, code that as 12 months per year and one hour per month.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Actual Service Years (ASY) [Plan: (new)]**

ASY Number:  Description:

How Defined Maximum **Hours Worked** Dates

**C3. Are participants credited one year for each year worked or does the amount of credited service depend on the actual number of hours worked each year?**

☐ Credited one ASY for each year employed; no minimum work requirements.

☐ Credited either zero or one ASY; one ASY is credited for each year worked a minimum of:  Hours Per Year

☐ Credited a prorated fraction from zero to one ASY; one full ASY is credited for each year worked a minimum of:  Weeks Per Year, AND  Hours Per Week

☐ Credited a prorated fraction from zero to more than one ASY; one full ASY is credited for each year worked a minimum of:  Months Per Year, AND  Hours Per Month

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:51 AM

Generally the ASY definition covers all years. Sometimes years of service depend on a prior plan's provisions for years before a certain date. For example, vesting service may be defined in one way prior to 1990 and defined in a different way from January 1, 1990 forward.

For “Before”, “From”, and “To”, the date is calculated in this manner:

$(\text{MONTH} - 1) \text{ divided by } 12 \text{ plus YEAR.}$

For “After”, the date is calculated in the following manner:

$\text{MONTH divided by } 12 \text{ plus YEAR.}$

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The main area is titled 'Actual Service Years (ASY) [Plan: (new)]'. It contains fields for 'ASY Number' (set to 1) and 'Description'. Below these are tabs for 'How Defined', 'Maximum', 'Hours Worked', and 'Dates'. The 'Dates' tab is active, displaying the question: 'C4. Is this definition of ASY based only on specific calendar time periods, or on all years covered by this pension plan?'. There are four radio button options: 'Covers all years: no specific dates cited.' (selected), 'Before: 12/1999', 'After: 12/1999', and 'From: 12/1999 To: 12/1999'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, open applications including 'Microsoft Word - UserMan...', and the system clock at 10:51 AM.

## **Final Average Pay (FAP)**

The benefit often depends on some measure average compensation. Be careful to mark the Monthly/Yearly option that is appropriate. Unless the plan expresses amounts on this page in months, mark this option “Yearly.” The most common method of calculating a retirement benefit under a defined benefit plan is to (1) wait until the employee retires, (2) calculate FAP based on an average of the employee's final years of earnings, and (3) calculate the retirement benefit. But under some defined benefit plans, the employee accrues a "benefit credit" each year. The "benefit credit" each year is based on the pension formula and the current year's salary. The benefit payable at retirement is the sum of the benefit credits. For example, each year the employee might earn a benefit credit equal to 10% of that year's salary. To code such a plan, mark the second option ("Total of All Months/Years."). The benefit formula would be written as "10% \* FAP1", the mathematical equivalent of the sum of each year's benefit credits. Notice that if FAP is defined as " Total of All Months/Years ", FAP will normally not be multiplied by ASY in the benefit formula.

In coding FAP, ignore detailed descriptions of the type of income to be included or excluded – commissions, bonuses, overtime, etc. Also ignore special provisions for calculating FAP when the employee has fewer years of service than the normal averaging period (e.g., the plan calls for an average of ten years of pay, but the participant has only seven years of service).

An example of a common definition of FAP is the average of the highest five of the last ten years pay. In that case, the user would mark the sixth option and type “5” and “10” in the related text boxes. Read the options here carefully. There are sometimes subtle differences.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Final Average Pay (FAP) [Plan: new]**

FAP Number:  Description:

How Defined: Monthly/Yearly Dates Maximum Age or Service Maximum Amount

**C27. How is Final Average Pay (FAP) defined for use in retirement formulas?**

☐ Monthly  
☐ Yearly

☐ Final Salary or Wage Rate  
☐ Total of All Months/Years  
☐ Average of All Months/Years  
☐ Average During Final # MO/YRS:   
☐ Highest MO/YR During Final # MO/YRS:   
☐ Average of the During Highest MO/YRS:   
 Final # MO/YRS:   
☐ Average of the During Highest Consecutive # MO/YRS:   
 Final # MO/YRS:   
☐ No Specified Period, Highest MO/YR  
☐ No Specified Period, Average of the Highest MO/YR:   
☐ No Specified Period, Average Highest Consecutive # MO/YR:

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:52 AM



This question asks whether the FAP used in the benefit formulas is expressed as a monthly or an annual amount. Unless there is a compelling reason to use “Monthly Amount”, mark the second or third option here. If FAP or other variables are expressed as monthly amounts in the plan, transform them to annual amounts before using them in a formula.

The screenshot shows the 'Pension Analyst' software interface. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Final Average Pay (FAP) [Plan: new]' dialog box is open, showing 'FAP Number: 1' and a 'Description' field. Below these are tabs for 'How Defined', 'Monthly/Yearly', 'Dates', 'Maximum Age or Service', and 'Maximum Amount'. The 'Monthly/Yearly' tab is selected, displaying the question 'C28. Is FAP expressed in monthly or annual amounts in benefit formulas?' with three radio button options: 'Monthly Amount', 'Yearly Amount', and 'Does Not Apply -- FAP Defined as Total of All MO/YRS'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button, open applications including Microsoft Word - UserMan..., and the Pension Analyst window, along with a system clock showing 10:52 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Final Average Pay (FAP) [Plan: new]**

FAP Number: 1 Description:

How Defined Monthly/Yearly Dates Maximum Age or Service Maximum Amount

**C28. Is FAP expressed in monthly or annual amounts in benefit formulas?**

☐ Monthly Amount

☐ Yearly Amount

☐ Does Not Apply -- FAP Defined as Total of All MO/YRS

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:52 AM

Generally the FAP definition covers all years. Sometimes final average pay is based on a prior plan's provisions for years before a certain date. For example, FAP may be defined in one way prior to 1990 and defined in a different way from January 1, 1990 forward.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Final Average Pay (FAP) [Plan: new]' window is open, showing a tabbed interface with 'How Defined', 'Monthly/Yearly', 'Dates', 'Maximum Age or Service', and 'Maximum Amount'. The 'Dates' tab is selected, displaying a question: 'C29. Is the above definition of FAP based on wages and salaries earned during specific calendar timer periods, or during all years covered by this pension plan?'. Below this are four radio button options: 'Covers all years: no specific dates cited.', 'Before: 12/1999', 'After: 12/1999', and 'From: 12/1999 To: 12/1999'. The 'From' and 'To' dates are both set to 12/1999. The window has a 'Sample Run' checkbox, 'Save' and 'Cancel' buttons, and a bottom bar with 'Add', 'Edit', 'Delete', and 'Close' buttons. The taskbar at the bottom shows the Start button and open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:46 AM.

A plan sometimes specifies a maximum age or number of service years beyond which compensation will not be used in the calculation of FAP. Although this sort of provision is rare, code it here when it is mentioned. Be sure to specify which ASY are counted (“Define ASY used on this page”) if ASY is used in the maximum.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The main window is titled 'Final Average Pay (FAP) [Plan: new]'. It has a menu bar (File, Edit, Options, Window, About) and a toolbar. The 'How Defined' tab is selected, showing options for 'Monthly/Yearly', 'Dates', 'Maximum Age or Service', and 'Maximum Amount'. The 'Maximum Age or Service' tab is active, displaying the question: 'C30. Is there a maximum age or service years after which any wages or salaries cannot be used in calculating FAP?'. Below this is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are six radio button options with corresponding input fields: 'Yes, Maximum Age:', 'Yes, Maximum ASY:', 'Yes, Maximum Age+ASY:', 'Yes, When Over Maximum Age: OR Over Maximum ASY:', 'Yes, When Over Maximum Age: AND Over Maximum ASY:', and 'No'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button and several open applications: 'Command Prompt', 'Microsoft Word - UserMa...', 'PenUI - Microsoft Visual ...', and 'Pension Analyst'. The system clock shows 10:47 AM.

The Internal Revenue Service limits the amount of annual compensation that can be used in the calculation of a qualified defined benefit plan. The approximate limit in effect during the time these plans were written was \$150,000. **You do not need to mention IRS maximums.** Note that this question is not asking whether there is a limit FAP can take on in the benefit formulas. It is asking whether there is a limit on the annual salaries that compose FAP. Code here any maximums mentioned that relate to the annual amounts to be used.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The 'Final Average Pay (FAP) [Plan: new]' dialog box is open, displaying tabs for 'How Defined', 'Monthly/Yearly', 'Dates', 'Maximum Age or Service', and 'Maximum Amount'. The 'Maximum Amount' tab is selected, showing the question 'C31. Is there a maximum on the amount of monthly/annual wages and salaries that can be used to calculate FAP?' with radio button options for 'Yes, Maximum of: [text box]' and 'No'. The 'Sample Run' checkbox is checked at the bottom left. The Windows taskbar at the bottom shows the Start button, open applications (Microsoft Word - UserMan..., Pension Analyst), and the system clock (10:53 AM).

## Mandatory Contributions in a DB Plan (MAN)

Although the employer generally bears a substantial part of the cost, defined benefit plans often require participants to contribute toward their plan. There are several options to be checked. If the plan mentions that contributions are taken out on a Pre-tax basis (i.e., the employee does not have to pay taxes on their contributions), mark the “Pre-tax” option. If the plan cites Post-tax, mark “Post-tax.” Otherwise, mark “Not Cited”.

Then mark the option that best describes the amount of the mandatory contribution. For instance, a plan may call for a 6% contribution on the part of the employee. If no maximum dollar amount is mentioned, mark the second option, write “.06” in first text box and “999999” in the second text box to indicate that there is no maximum.

Another plan might state that the participant contributes 5% of the first \$72,600. Assuming the plan last amendment date is 1999, mark “Fixed Percentage of Pay below SSWB”, and write “.05” in the corresponding text box. For further explanation of this example, see “Social Security Terms” in the first section of this document. Occasionally, the contribution is expressed as a sliding scale. In that case, press the “Table” button.

The screenshot displays the "Pension Analyst" software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The "Mandatory Contributions(MAN) [Plan: new]" dialog box is open, showing the "How Defined" tab. It contains fields for "MAN Number" (7) and "Description". Below these are tabs for "SSWB", "Withdrawal", "Interest Rate", and "Interest Period". The main section is titled "C6. On an annual basis, how is the mandatory contribution (MAN) calculated?". It features radio buttons for "Pre-Tax", "Post-Tax", and "Not Cited" (selected). A "Define ASY used on this page" button is next to the "Not Cited" option. Below are several options with associated text boxes: "Fixed Dollar Amount", "Fixed Percentage of up to Maximum" (with "Pay:" and "Contribution:" boxes), "Fixed Percentage of Pay at or Below SSWB", "Fixed Percentage of Pay Above SSWB", "Fixed Percentage of Pay Above SSWB up to Maximum" (with "Pay:" and "Contribution:" boxes), and "Varying Dollar or Percentage:" (with a "Table" button). At the bottom of the dialog are "Add", "Edit", "Delete", and "Close" buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:53 AM.

The use of the variable rate table can be demonstrated with an example. A plan may call for a contribution of 5% on the first \$20,000 of income, a contribution of 6% on any income between \$20,000 and \$30,000, and a contribution of 7% of income above \$30,000. This provision would be represented as follows. Note that the right hand ranges must be contiguous. If a plan requires a 5% contribution on the first \$20,000 of income and also requires a 7% contribution on income over \$30,000, two MANs should be coded to capture the provisions.

**Pension Analyst**  
File Edit Options Window About

**Variable Rate Contribution**

☐ Dollar Amount  
☒ Percentage of Pay  
☐ Percentage of (Pay > SSWB)  
☐ Percentage of (Pay <= SSWB)

☒ Pay  
☐ Age  
☐ ASY  
☐ Age + ASY

|       |                 |          |
|-------|-----------------|----------|
| 5.00% | Under (No MIN): | \$20,000 |
| 0     | From (MIN):     | 0        |
|       | To:             | 0        |
| 6.00% | From:           | \$20,000 |
|       | To:             | \$30,000 |
| 0     | From:           | 0        |
|       | To:             | 0        |
| 7.00% | Over (No MAX):  | \$30,000 |

Close

☒ Varying Dollar or Percentage: Table

☒ Sample Run  
 Save Cancel

Microsoft Word - UserMan... Pension Analyst My Briefcase 10:55 AM

If the option marked on the prior tab involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The main window is titled 'Mandatory Contributions(MAN) [Plan: (new)]'. It has tabs for 'How Defined', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Withdrawal' tab is active, displaying question C8: 'Can participants withdraw any mandatory contributions they made to this pension plan if they terminate employment before they become eligible for retirement?'. Below the question is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are several radio button options for withdrawal conditions, each with associated input fields for Age and ASY. The options are: 'Yes, Can Immediately Withdraw Contributions at termination', 'Yes, After' (with Age field), 'Yes, After' (with ASY field), 'Yes, After' (with AGE+ASY field), 'Yes, After OR After' (with AGE and ASY fields), 'Yes, After AND After' (with Age and ASY fields), 'No, Canot Withdraw Contributions', and 'Not Cited'. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close', along with navigation arrows. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:54 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Mandatory Contributions(MAN) [Plan: (new)]**

MAN Number: 7 Description:

How Defined SSWB **Withdrawal** Interest Rate Interest Period

**C8. Can participants withdraw any mandatory contributions they made to this pension plan if they terminate employment before they become eligible for retirement?**

Define ASY used on this page

ASY Not Selected

☐ Yes, Can Immediately Withdraw Contributions at termination  
☐ Yes, After Age:   
☐ Yes, After ASY:   
☐ Yes, After AGE+ASY:   
☐ Yes, After OR After AGE:   
 ASY:   
☐ Yes, After AND After Age:   
 ASY:   
☐ No, Canot Withdraw Contributions  
☐ Not Cited

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:54 AM

Some plans allow participants who leave the organization before being eligible for retirement to withdraw their mandatory contributions. If the plan allows withdrawal only if the total amount of contributions is very small, code that as “No, Cannot Withdraw Contributions.”

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Mandatory Contributions (MAN)' folder is expanded, showing a sub-item 'MAN7'. The main window is titled 'Mandatory Contributions(MAN) [Plan: (new)]'. It features a 'MAN Number' field with the value '7' and a 'Description' field. Below these are tabs for 'How Defined', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Withdrawal' tab is active, showing a question: 'C8. Can participants withdraw any mandatory contributions they made to this pension plan if they terminate employment before they become eligible for retirement?'. A sub-section 'Define ASY used on this page' has a dropdown menu set to 'ASY Not Selected'. Below this are several radio button options for withdrawal conditions, each with associated input fields for Age and ASY. The options are: 'Yes, Can Immediately Withdraw Contributions at termination', 'Yes, After' (with Age field), 'Yes, After' (with ASY field), 'Yes, After' (with AGE+ASY field), 'Yes, After OR After' (with Age and ASY fields), 'Yes, After AND After' (with Age and ASY fields), 'No, Canot Withdraw Contributions', and 'Not Cited'. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:56 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Mandatory Contributions(MAN) [Plan: (new)]**

MAN Number: 7 Description:

How Defined SSWB Withdrawal Interest Rate Interest Period

**C8. Can participants withdraw any mandatory contributions they made to this pension plan if they terminate employment before they become eligible for retirement?**

Define ASY used on this page

ASY Not Selected

☐ Yes, Can Immediately Withdraw Contributions at termination

☐ Yes, After Age:

☐ Yes, After ASY:

☐ Yes, After AGE+ASY:

☐ Yes, After OR After Age: ASY:

☐ Yes, After AND After Age: ASY:

☐ No, Canot Withdraw Contributions

☐ Not Cited

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:56 AM



Sometimes plans specify that mandatory contributions will accrue interest. Note the interest provision here.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Mandatory Contributions (MAN)' folder is expanded, showing a sub-item 'MAN7'. The main area shows a dialog box titled 'Mandatory Contributions(MAN) [Plan: {new}]'. It has tabs for 'How Defined', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Interest Rate' tab is selected, showing a question: 'C9. Does the amount received by the participant include accrued interest?'. Below this are four radio button options: 'Yes, Interest Accrued at an Annual Rate of: [ ]', 'Yes, Interest Paid, Annual Rate not Cited', 'No, Interest not Paid', and 'Not Cited'. The 'Interest Rate' tab also has a text field for 'Annual Rate of:'. The dialog box has 'Add', 'Edit', 'Delete', and 'Close' buttons at the bottom. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:56 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Mandatory Contributions(MAN) [Plan: {new}]**

MAN Number: 7 Description: [ ]

How Defined SSWB Withdrawal **Interest Rate** Interest Period

**C9. Does the amount received by the participant include accrued interest?**

☐ Yes, Interest Accrued at an Annual Rate of: [ ]

☐ Yes, Interest Paid, Annual Rate not Cited

☐ No, Interest not Paid

☐ Not Cited

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:56 AM

Plans that pay interest sometimes restrict the period over which interest will accrue. Use “Not Cited” here only when there is mention of a restriction, but no specific restriction is defined. If interest accrues and no restriction is mentioned, mark “Accrue Interest Over the Entire Period.”

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Mandatory Contributions (MAN) [Plan: (new)]' window is open, displaying the 'Interest Period' tab. It contains a form for defining interest accrual rules. The 'MAN Number' is 7. The question 'C10. Does the interest accrue over the entire period since the participant first started making contributions, or only after a certain age or minimum ASY?' is shown. Below it, a dropdown menu is set to 'ASY Not Selected'. Several radio button options are listed for interest accrual conditions, including 'Does not Apply -- No Interest Paid', 'Accrue Interest Over the Entire Period', and various 'Accrue Interest After' conditions based on Age, ASY, or combinations thereof. The 'Not Cited' option is also present. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:57 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

**Mandatory Contributions(MAN) [Plan: (new)]**

MAN Number: 7 Description:

How Defined SSWB Withdrawal Interest Rate Interest Period

**C10. Does the interest accrue over the entire period since the participant first started making contributions, or only after a certain age or minimum ASY?**

Define ASY used on this page

ASY Not Selected

☐ Does not Apply -- No Interest Paid  
☐ Accrue Interest Over the Entire Period  
☐ Accrue Interest After Age:   
☐ Accrue Interest After ASY:   
☐ Accrue Interest After AGE+ASY:   
☐ Accrue Interest After Age:   
☐ OR After ASY:   
☐ Accrue Interest After Age:   
☐ AND After ASY:   
☐ Not Cited

☒ Sample Run  
 Save Cancel

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:57 AM

## Voluntary Contributions in a DB plan (VOL)

Rarely, a defined benefit plan mentions a Voluntary contribution (VOL). Sometimes, the voluntary contribution is simply a 401-k or thrift plan that is described in the same SPD as the defined benefit plan. If the voluntary contribution seems to be a simple 401-k or thrift plan, and the defined benefit in no way depends on the voluntary contribution, code the voluntary contribution as a separate defined contribution plan. If, however, the voluntary contribution affects the amount of the defined benefit (e.g., making this voluntary contribution qualifies the participant for a more generous formula), then the voluntary contribution is properly coded here.

A minimum is sometimes required for a voluntary contribution. Firms do not want to incur the record keeping costs for very small amounts. It is not at all uncommon for the minimum to be 1% of pay, for instance. The third option would be checked, and “1%” and “999999” would be written in the related text boxes. Remember, “999999” will always indicate that there is no maximum. Be sure to note if the contribution is specifically cited as being pre or post tax.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Voluntary Contributions (VOL)' folder is expanded, showing 'VOL7'. The main window is titled 'Voluntary Contributions [VOL] [Plan: (new)]'. It has tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Minimum' tab is active, showing the question 'C11. What annual minimums apply to this voluntary contribution?'. Below this are several radio button options: 'Pre-Tax', 'Post-Tax', and 'Not Cited' (selected). There are also options for 'No Minimum Amount', 'Fixed Dollar Amount', 'Fixed Percentage of Up To', 'Fixed Percentage of Pay at or Below SSWB', 'Fixed Percentage of Pay Above SSWB', and 'Fixed Percentage of Pay Above SSWB Up To'. Each option has associated text boxes for input. At the bottom, there are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:57 AM.

Normally, maximums are cited as annual maximums. Occasionally, though, a plan will let participants “make up” years that they contributed less than the maximum. For instance if the participant contributed only half the maximum last year, they could contribute the maximum this year plus half of last year’s maximum. Check “Annual” or “Career” as applicable. Assume contribution maximums are annual unless there is reason to believe otherwise. “Not Cited” should only be used in ambiguous cases.

Then mark the option that best describes the maximum. For instance, a plan may call for a 6% maximum contribution on the part of the employee. If no maximum dollar amount is mentioned, mark the second option, write “.06” in first text box and “999999” in the second text box to indicate that there is no maximum. Occasionally, the contribution is expressed as a sliding scale. In that case, press the “Table” button.

The screenshot shows the "Pension Analyst" software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The "Voluntary Contributions (VOL) [Plan: (new)]" dialog box is open. It has tabs for Minimum, Maximum, SSWB, Withdrawal, Interest Rate, and Interest Period. The "Maximum" tab is selected. The dialog contains the question: "C12. Aside from IRS maximums, what annual or career average maximums apply to this voluntary contribution?". There are radio buttons for "Annual", "Career", and "Not Cited". The "Not Cited" option is selected. Below this is a section for "Define ASY used on this page" with a dropdown menu showing "ASY Not Selected". Further down are several options for maximums: "No Maximum Amount", "Fixed Dollar Amount" (with a text box), "Fixed Percentage of Up To" (with "Pay:" and "Maximum Contribution:" text boxes), "Fixed Percentage of Pay At or Below SSWB:" (with a text box), "Fixed Percentage of Pay Above SSWB:" (with a text box), "Fixed Percentage of Pay Above SSWB: With Maximum Contribution:" (with two text boxes), and "Varying Dollar or Percentage:" (with a "Table" button). At the bottom of the dialog are "Add", "Edit", "Delete", and "Close" buttons. The main window has a menu bar (File, Edit, Options, Window, About) and a toolbar. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:57 AM.

If the option marked on the prior tabs involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that the term “Covered Compensation” is generally defined as the career average Social Security Wage Base.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Voluntary Contributions (VOL) [Plan: (new)]' tab is active, displaying a form with fields for VDL Number (7) and Description. Below these are tabs for Minimum, Maximum, SSWB, Withdrawal, Interest Rate, and Interest Period. The 'SSWB' tab is selected, showing question C13: 'Do any of the voluntary contribution formulas depend on the total Social Security taxable wage base (SSWB)?'. Four radio button options are provided: 'Yes, Actual SSWB in effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year' (with an adjacent input field), and 'No'. The 'Sample Run' checkbox is checked at the bottom left. The Windows taskbar at the bottom shows the Start button, taskbar icons, and the system clock at 10:58 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Voluntary Contributions (VOL) [Plan: (new)]**

VDL Number: 7 Description:

Minimum Maximum SSWB Withdrawal Interest Rate Interest Period

**C13. Do any of the voluntary contribution formulas depend on the total Social Security taxable wage base (SSWB)?**

☐ Yes, Actual SSWB in effect Each Year

☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year:

☐ No

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:58 AM

Some plans allow participants who leave the organization before being eligible for retirement to withdraw their voluntary contributions. If the plan allows withdrawal only if the total amount of contributions is very small, code that as “No, Cannot Withdraw Contributions.”

The screenshot shows the 'Pension Analyst' software window. On the left is a 'Variables' tree with folders for 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', and 'Reduction Factors (RED)'. The 'VOL' folder is expanded, showing 'MAN7' and 'VOL7'. Below the tree are buttons for 'Sample Run', 'Save', and 'Cancel'. The main window is titled 'Voluntary Contributions [VOL] [Plan: (new)]'. It has tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Withdrawal' tab is active. It contains a question: 'C14. Can participants withdraw any voluntary contributions they made to this pension plan if they terminate employment before they become eligible for retirement?'. Below the question is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are several radio button options: 'Yes, Can Immediately Withdraw Contributions at termination', 'Yes, After' (with fields for Age, ASY, and AGE+ASY), 'Yes, After OR After' (with fields for Age and ASY), 'Yes, After AND After' (with fields for Age and ASY), 'No, Cannot Withdraw Contributions', and 'Not Cited'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Close', and navigation arrows. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:58 AM.

Sometimes plans specify that voluntary contributions will accrue interest. Note the interest provision here.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Voluntary Contributions (VOL) [Plan: (new)]' form is open on the right. It features a 'VOL Number' field with the value '7' and a 'Description' field. Below these are tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Interest Rate' tab is selected, showing a question: 'C15. Does the amount received by the participant include accrued interest?'. Four radio button options are provided: 'Yes, Interest Accrued at an Annual Rate of: [ ]', 'Yes, Interest Paid, Annual Rate not Cited', 'No, Interest not Paid', and 'Not Cited'. The 'Interest Rate' field is currently empty. At the bottom of the form are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:58 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Voluntary Contributions (VOL) [Plan: (new)]**

VOL Number: 7 Description:

Minimum Maximum SSWB Withdrawal **Interest Rate** Interest Period

**C15. Does the amount received by the participant include accrued interest?**

☐ Yes, Interest Accrued at an Annual Rate of:

☐ Yes, Interest Paid, Annual Rate not Cited

☐ No, Interest not Paid

☐ Not Cited

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:58 AM

Plans that pay interest sometimes restrict the period over which interest will accrue. Use “Not Cited” here only when there is mention of a restriction, but no specific restriction is defined. If interest accrues and no restriction is mentioned, mark “Accrue Interest Over the Entire Period.”

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'VOL' folder is expanded, showing 'MAN7' and 'VOL7'. The main window is titled 'Voluntary Contributions [VOL] [Plan: (new)]'. It has tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdrawal', 'Interest Rate', and 'Interest Period'. The 'Interest Period' tab is active. It contains a question: 'C16. Does the interest accrue over the entire time period since the participant first started Contributions, or only after a certain age or minimum number of service years?'. Below this is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are several radio button options: 'Does not Apply -- No Interest Paid', 'Accrue Interest Over the Entire Period', 'Accrue Interest After' (with fields for Age and ASY), 'Accrue Interest After AGE+ASY', 'Accrue Interest After OR After' (with fields for Age and ASY), 'Accrue Interest After AND After' (with fields for Age and ASY), and 'Not Cited'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Close', and navigation arrows. The Windows taskbar at the bottom shows the Start button, several icons, and the taskbar with 'Microsoft Word - UserMan...', 'Pension Analyst', and 'My Briefcase' open, with the time 10:58 AM.



## Potential Years of Service (PSY)

Some plans define a measure of how long the participant might have stayed with the firm. This measure, termed Potential Years of Service (PSY), is often set at age 65 or normal retirement age. Code here the ages and tenure used to define potential years of service.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', 'Reduction Factors (RED)', 'Qualifications', 'Formulas', and 'Other'. The 'Potential Service Years (PSY)' folder is expanded, showing sub-items 'MAN7', 'VOL7', and 'PSY1'. The main window is titled 'Potential Service Years (PSY) [Plan: new]'. It contains a 'PSY Number' field with the value '1' and a 'Description' field. Below these are tabs for 'How Defined', 'Dates', and 'Maximum'. The 'How Defined' tab is active, displaying the question 'C23a. How is the number of potential years of credited service (PSY) determined for use in the retirement formulas?'. Five radio button options are listed, each with associated 'Age' and '# Years' input fields. The first option is 'Assumes Participant Works Until Count All Years Since First Employed'. The second is 'Assumes Participant Works Until Count Only Years Employed After'. The third is 'Assumes Participant Works Until Count Only Years Employed After First'. The fourth is 'Assumes Participant Works Until Count Only Years Employed After Or Only Years After First'. The fifth is 'Assumes Participant Works Until Count Only Years Employed After AND Only Years After First'. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 10:59 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Final Average Pay (FAP)
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
  - PSY1
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Potential Service Years (PSY) [Plan: new]**

PSY Number: 1 Description:

How Defined Dates Maximum

**C23a. How is the number of potential years of credited service (PSY) determined for use in the retirement formulas?**

- ☐ Assumes Participant Works Until Count All Years Since First Employed Age:
- ☐ Assumes Participant Works Until Count Only Years Employed After Age:
- ☐ Assumes Participant Works Until Count Only Years Employed After First # Years:
- ☐ Assumes Participant Works Until Count Only Years Employed After Or Only Years After First Age: # Years:
- ☐ Assumes Participant Works Until Count Only Years Employed After AND Only Years After First Age: # Years:

Add Edit Delete Close

Start Microsoft Word - UserMan... Pension Analyst My Briefcase 10:59 AM

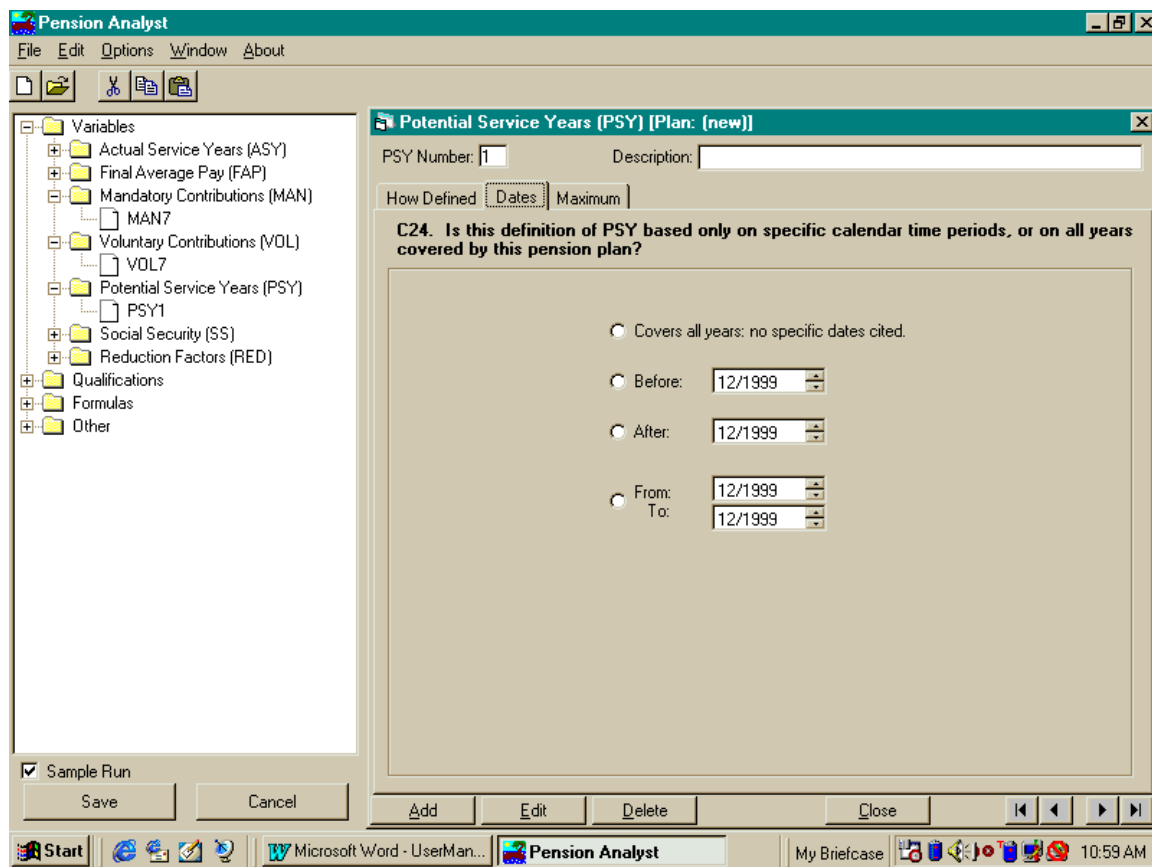
Generally the PSY definition covers all years. Sometimes years of service depend on a prior plan's provisions for years before a certain date. For example, vesting service may be defined in one way prior to 1990 and defined in a different way from January 1, 1990 forward.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.



There may be a maximum number of PSY that can be used in calculating retirement benefits. Note any maximums here.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Potential Service Years (PSY) [Plan: new]' dialog box is open on the right. It has tabs for 'How Defined', 'Dates', and 'Maximum'. The 'Maximum' tab is selected, showing a question: 'C25. Is there a maximum number of potential credited service years that can be used for retirement benefits?'. Below the question are two radio buttons: 'Yes, Maximum PSY:' followed by a text input field, and 'No'. The 'PSY Number' is set to 1 and the 'Description' field is empty. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:51 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
  - PSY1
- Social Security (SS)
- Reduction Factors (RED)
- Qualifications
- Formulas
- Other

☒ Sample Run

Save Cancel

**Potential Service Years (PSY) [Plan: new]**

PSY Number: 1 Description:

How Defined Dates Maximum

**C25. Is there a maximum number of potential credited service years that can be used for retirement benefits?**

☐ Yes, Maximum PSY:

☐ No

Add Edit Delete Close

Start Command Prompt Microsoft Word - UserMa... PenUI - Microsoft Visual ... Pension Analyst 10:51 AM

## **Social Security (SS)**

The participant's Social Security benefit or Social Security taxable wage base is often used in formulas (SS).

The Social Security primary benefit amount is that portion of a retiree's benefit to which they are entitled based on their own employment. The Social Security joint benefit amount is the combined family benefit received, including any benefit for spouse and/or dependents.

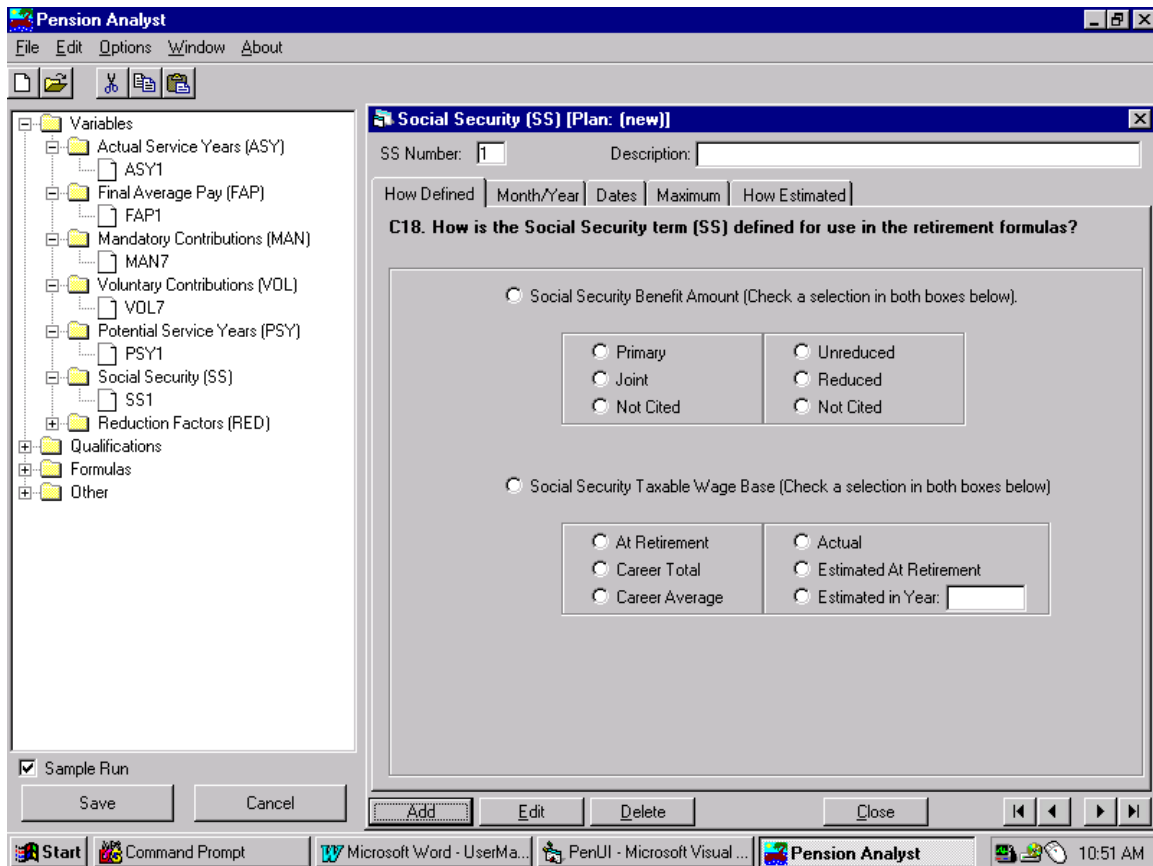
Social Security benefits are paid either in a reduced amount, if payments begin before age 65, or in an unreduced amount, if payments begin at age 65 or later.

If the employee's benefits will be calculated using the Social Security taxable wage base in effect during the year he/she retires, mark the box "At Retirement" and the box marked "Actual" (i.e., the actual SS wage base in effect at retirement).

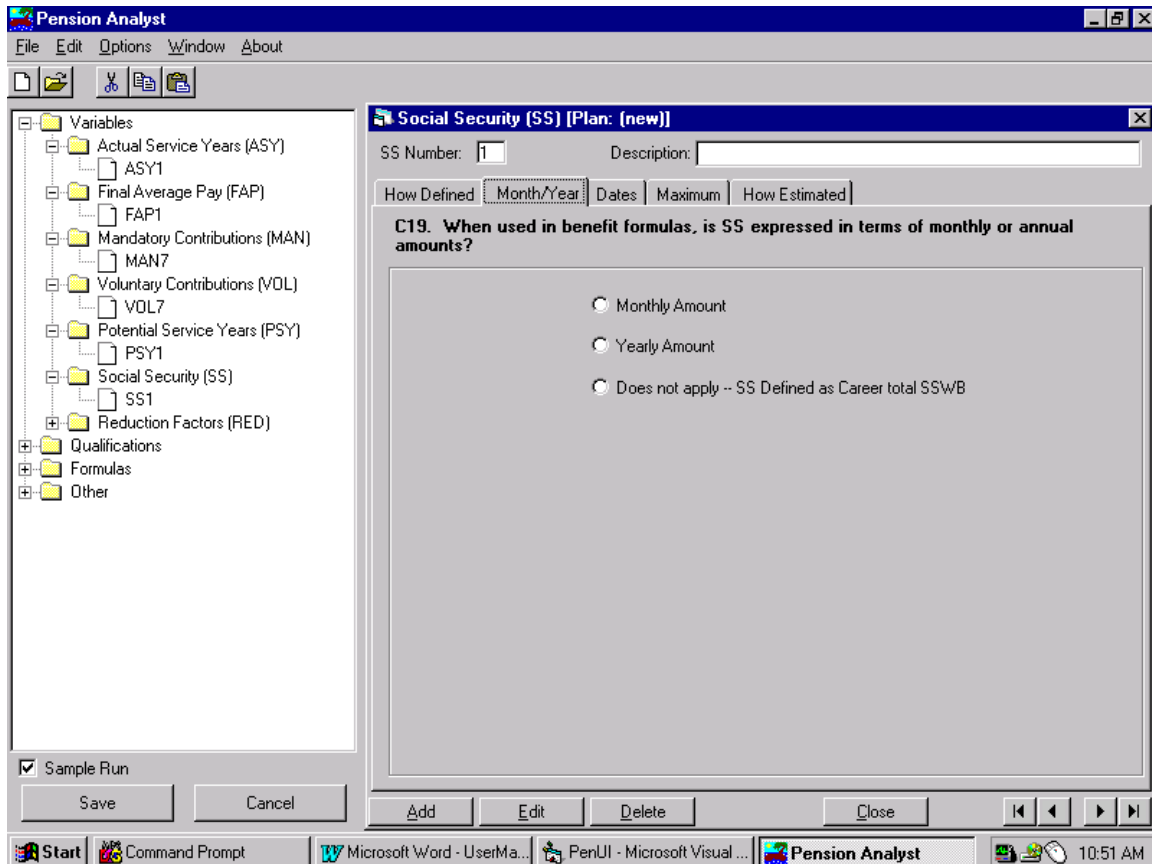
If the employee accrues a "benefit credit" each year, based on a formula that incorporates that year's wage base, mark the boxes "Career Total" and "Actual" (i.e., the retirement benefit is based on actual Social Security wage bases throughout the employee's career).

"Covered Compensation" is a term that generally means the average of the Social Security Wage Base during the 35 years prior to retirement. Code this as Social Security Taxable Wage Base – Career Average – Estimated at Retirement.

In a few cases, benefit formulas use an average wage base estimated in some particular year, even though the estimate has become outdated. The Social Security Administration publishes tables of estimated career average wage bases, based on predictions about future increases in the wage base. Even after the predictions prove false, some plans continue to use the estimates. These plans often state that they use the Covered Compensation estimates as of a particular year.



This question asks if the normal retirement benefit formulas are calculated using a monthly Social Security term or an annual Social Security term. If the benefit formulas contain a Social Security offset, mark box "Yearly" (because it is preferable to express all terms as annual amounts), unless there is an important reason to use the "Monthly" definition. Use the third option if the formula uses the career total SS wage base as a breakpoint.



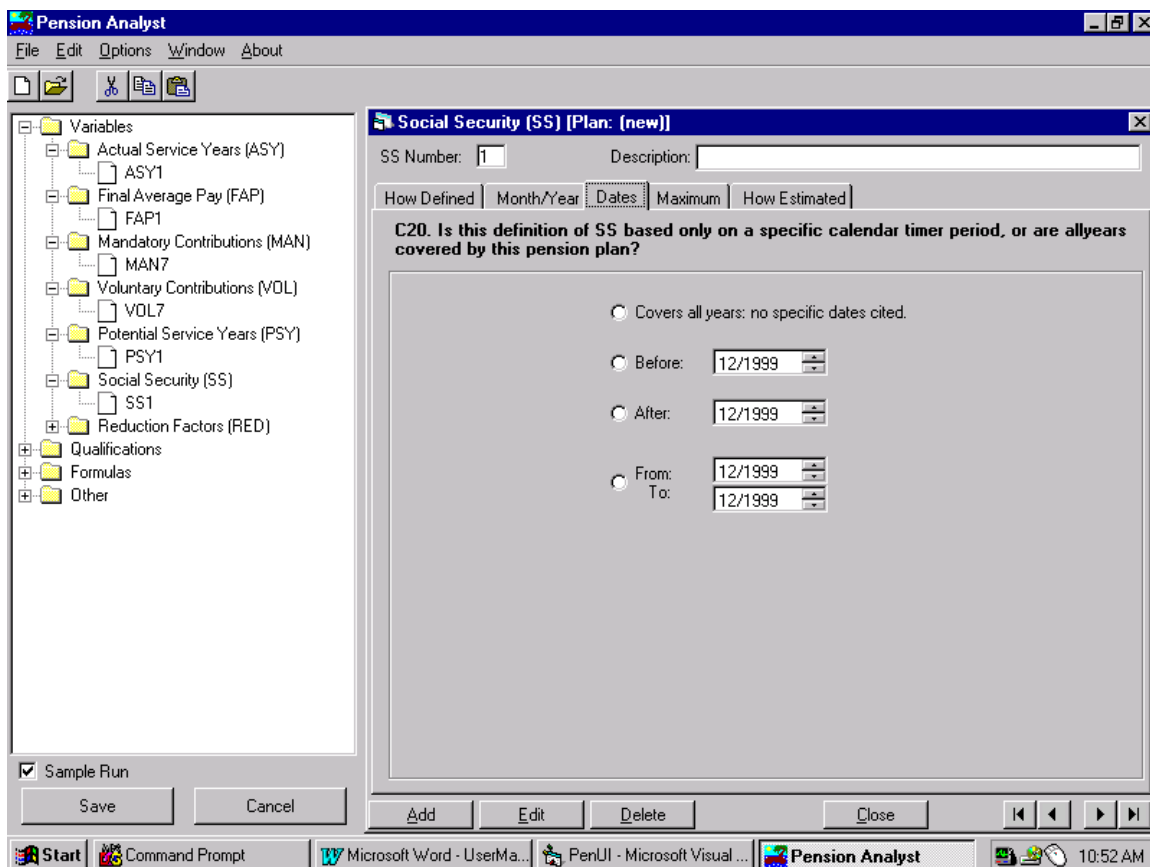
Generally the SS definition covers all years. Sometimes years of service depend on a prior plan's provisions for years before a certain date. For example, vesting service may be defined in one way prior to 1990 and defined in a different way from January 1, 1990 forward.

For “Before”, “From”, and “To”, the date is calculated in this manner:

$(\text{MONTH} - 1) \text{ divided by } 12 \text{ plus YEAR.}$

For “After”, the date is calculated in the following manner:

$\text{MONTH divided by } 12 \text{ plus YEAR.}$



Occasionally, the plan will specify a maximum for the Social Security term. Be particularly careful here because the maximum is a maximum for the Social Security term alone. An example will help clarify the potential misuse. Assume for instance that a plan calls for a benefit of 1.5% times final average pay times years of service, but this benefit is reduced by 1.2% times the person's Social Security benefit times years of service. Lastly, the plan states that the term, 1.2% times Social Security times years of service, cannot exceed 50% of the person's Social Security benefit. An analyst might mark the first option, enter ".5" in the related text box, and code such a formula as:

$(FAP1 * 1.5\% - SS1 * 1.2\%) * ASY1$

The maximum here though is the maximum on the social security term itself (SS1 here). The unintended consequence would be that the Social Security offset in most cases would be understated by 50%, significantly overstating the benefit. To correctly code the scenario above, mark this question "No", and enter this formula :

$FAP1 * 1.5\% * ASY1 - \text{MIN}(SS1 * 1.2\% * ASY1 \text{ OR } 50\% * SS1)$

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Formulas, and Other. The 'Social Security (SS) [Plan: new]' dialog box is open, showing the 'Maximum' tab. It contains a question: 'C21. Is there a maximum limitation on the amount of SS that can be used to determine benefits or a maximum on service years or age after which SS no longer accrues?'. Below the question are several radio button options for defining the maximum, such as 'Yes, Maximum Percentage of SS:', 'Yes, Maximum Dollar Amount:', 'Yes, Maximum Age:', etc. The 'No' option is selected. The dialog also includes fields for 'SS Number' (1) and 'Description'. At the bottom, there are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and several open applications including Command Prompt, Microsoft Word, and PenUI.



Often a plan allows retirement before the onset of Social Security benefits. If the pension benefit is in some way determined by the Social Security benefit, the Social Security benefit must be estimated. If the Social Security term defines Social Security Wage Base, this question does not apply, and the first option should be marked.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', and 'Reduction Factors (RED)'. The 'Social Security (SS)' variable is selected. The main window is titled 'Social Security (SS) [Plan: (new)]' and contains a 'How Defined' tab and a 'How Estimated' tab. The 'How Estimated' tab is active, showing a question: 'C22. If participants can retire before they are eligible to receive Social Security benefits, how is the SS term estimated for use in the pension formula(s)?'. Below the question are five radio button options: 'Does Not Apply', 'Benefit Expected at Age: [ ] Assumes Participant Has No Future Wage or Salary Income', 'Benefit Expected at Age: [ ] Assumes Participant Works Until Then at Current Wages or Salary', 'Benefit Expected at Age: [ ] Assumes Participant Works Until Then, with Annual Income Increases of: [ ]', and 'Estimation Method Not Cited'. The 'Does Not Apply' option is selected. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and several open applications: 'Command Prompt', 'Microsoft Word - UserMa...', 'PenUI - Microsoft Visual ...', and 'Pension Analyst'. The system clock shows 10:52 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
  - PSY1
- Social Security (SS)
  - SS1
- Reduction Factors (RED)

Qualifications

Formulas

Other

☒ Sample Run

Save Cancel

**Social Security (SS) [Plan: (new)]**

SS Number: 1 Description:

How Defined Month/Year Dates Maximum How Estimated

**C22. If participants can retire before they are eligible to receive Social Security benefits, how is the SS term estimated for use in the pension formula(s)?**

☒ Does Not Apply

☐ Benefit Expected at Age: [ ] Assumes Participant Has No Future Wage or Salary Income

☐ Benefit Expected at Age: [ ] Assumes Participant Works Until Then at Current Wages or Salary

☐ Benefit Expected at Age: [ ] Assumes Participant Works Until Then, with Annual Income Increases of: [ ]

☐ Estimation Method Not Cited

Add Edit Delete Close

Start Command Prompt Microsoft Word - UserMa... PenUI - Microsoft Visual ... Pension Analyst 10:52 AM

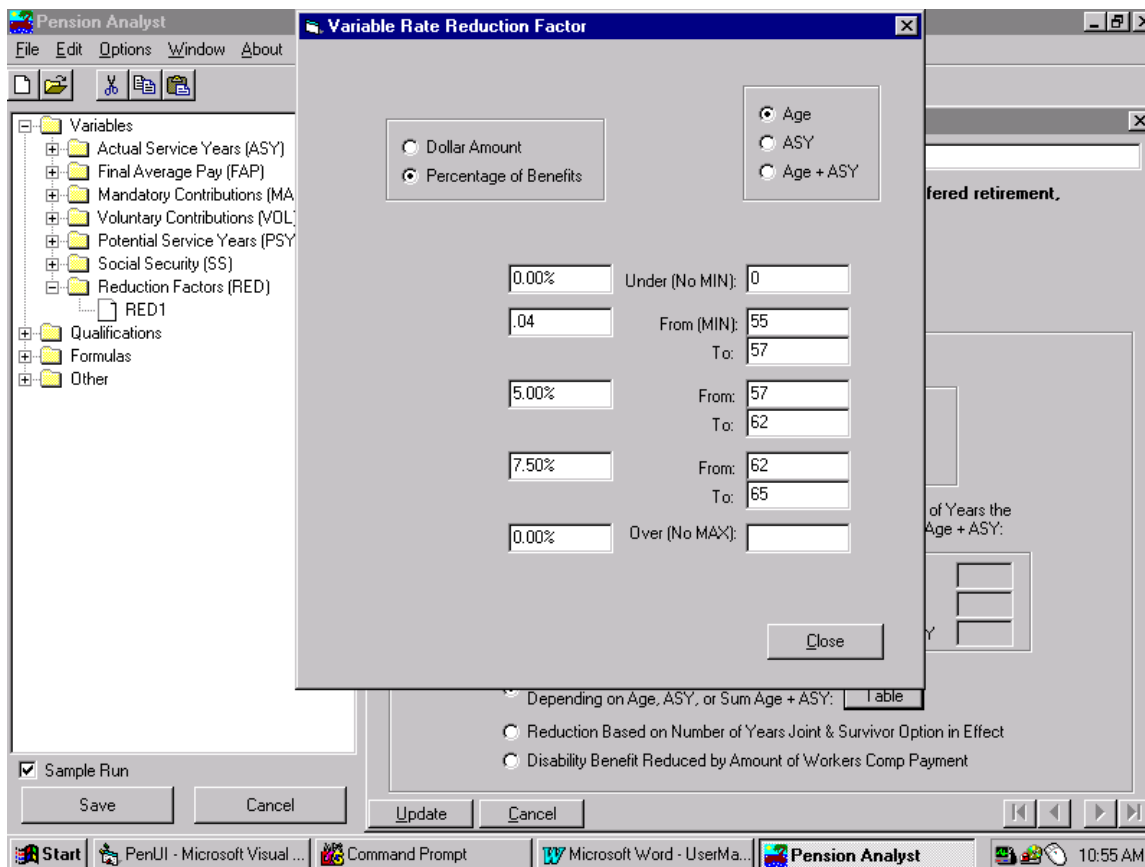
## Reduction Factors (RED)

When a plan allows a participant to retire earlier than normal retirement age, the plan often calls for a reduction of the benefit because the benefit will be paid out over more years. Here, some specific examples would be useful. If the plan says the benefit will be actuarially reduced for the number of years early retirement falls short of age 65, check the first option, check “AGE” and fill in the text box with “65.” If there is an exactly similar situation, but the plan does not specifically use the word “actuarially,” code that provision exactly the same way (i.e., we will assume the reduction is actuarially based).

Many times, the plan will specify precisely what the reduction factors are. For instance, the plan may read “The benefit will be reduced by 5% per year for each year before age 65 that payments begin. In that case, the second option would be chosen, the “%” and “Age” options checked, and “.05” and “65” typed into the related text boxes.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), and RED1. The main area is titled 'Reduction Factors (RED) [Plan: (new)]'. It contains a 'REDNumber' field, a 'Description' field, and a question: 'C33. How are the reduction factors for early retirement, vested deferred retirement, disability retirement and death benefits defined?'. Below this is a dropdown menu 'Define ASY if used on this page' set to 'ASY Not Selected'. There are four radio button options: 'Actuarially Equivalent to Benefits Received at:', 'Fixed Dollar or Percent Reduction, Multiplied by the Number of Years the Participant Retires Before Reaching a Certain Age, ASY, or Age + ASY:', 'Varying Dollar or Percent Reduction Depending on Age, ASY, or Sum Age + ASY:', and 'Reduction Based on Number of Years Joint & Survivor Option in Effect'. The first option has sub-options 'AGE', 'AGE + ASY', and 'Normal Retirement'. The second option has sub-options for dollar or percent reduction and for Age, ASY, or Age + ASY. The third option has a 'Table' button. The fourth option has a sub-option 'Disability Benefit Reduced by Amount of Workers Comp Payment'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Close', and navigation arrows. The taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 2:30 PM.

Frequently, the plan will explicitly specify reduction factors, and those reduction amounts vary with age, years of service or both. For example, a plan allowing early retirement anytime between 55 and 65 has the following schedule of reductions. If the participant retires at age 62 or later, the participant's benefit will be reduced by 7.5% for each year benefits start before the age of 65. If the participant begins receiving benefits after age 57 but before reaching age 62, the participant's benefit will be further reduced by 5% for each year benefits start before age 62. If the participant begins receiving benefits prior to age 57, the participant's benefit will be further reduced by 4% for each year benefits start before age 57. This reduction factor would be coded as follows:



## Age & Service Requirements (RAS)

Generally, in order to receive a benefit, a participant must meet certain minimum Age and Service Requirement (RAS). Note that this qualification is independent of vesting. So if only vested participant are eligible to receive a benefit at age 65, and vesting requires 5 years of service, you would ignore the vesting requirement (it will be entered elsewhere). Enter “65” in text box next to the “Minimum Age of: and No Minimum ASY” caption. This item is one of a very few that multiple items can be used. Several items are repeated to enable different Age and ASY combinations, for instance. If these categories do not seem to fit, press the “For Additional RAS Definitions, Click Here” button at the bottom of this form. The definitions on that form are self-explanatory.

Do not code age/service requirements that qualify an employee to receive retirement benefits in cases of layoffs, plant shutdowns, or retirement at the request of the employer.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Age & Service Requirements (RAS), Date Requirements (DAT), Other Requirements (ROT), Annuity Length (LNG), Annuity Start Date (BEG), Formulas, and Other. The 'Requirements for Age & Service (RAS) [Plan: new]' dialog box is open, featuring a 'RASNumber' field, a 'Description' field, and a section titled 'E1. What combinations of age and actual service years are required (RAS) to receive pension benefits or supplements (Check all combinations that apply)'. This section includes a 'Define ASY used on this page' dropdown menu set to 'ASY Not Selected', and several checkboxes for different RAS combinations: 'No Minimum Age or ASY' (checked), 'Minimum Age of: and No Minimum ASY', 'Minimum ASY of: and No minimum Age', 'Minimum Age of: and Minimum ASY of:', and 'Minimum Age of: and Minimum ASY of:'. Each combination has associated input fields. At the bottom of the dialog is a button labeled 'For Additional RAS definitions, click here'. The main window has a menu bar (File, Edit, Options, Window, About) and a toolbar. The taskbar at the bottom shows the Start button, open applications (Microsoft Word - UserMan..., Pension Analyst), and the system clock (11:00 AM).

## Date Restrictions (DAT)

Generally a formula covers all service years. This question asks whether a person has to retire during a specific calendar time period to qualify for a particular benefit. For example, one formula may apply if the participant retires before 1998 and another formula may apply if retirement occurs after January 1, 1998.

For “Before”, “From”, and “To”, the date is calculated in this manner:  
(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:  
MONTH divided by 12 plus YEAR.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of the software's structure, including folders for 'Variables', 'Qualifications', and 'Formulas'. The 'Date Requirements (DAT)' folder is selected. The main window displays the 'Date Requirements (DAT) [Plan: (new)]' dialog box. This dialog has a 'DAT Number' field and a 'Description' field. Below these is a question: 'E2. Do the benefit formulas apply only to participants that terminate employment during a specific calendar period, or to all retirement dates (DAT)?'. There are four radio button options: 'Covers all years: no specific dates cited.', 'Before:', 'After:', and 'From: To:'. Each date field is a dropdown menu currently showing '12/1999'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several open applications including 'Microsoft Word - UserMan...', and the system clock at 11:00 AM.

## Other Requirements (ROT)

This Other Requirements section (ROT) is designed to capture a variety of plan requirements for benefits. Note that this is one of the few areas in which you can check several options. Caution: although this section supports multiple selections, the Pension Calculation program may fail because not all combinations are handled in that program. If you trigger such a failure, contact a supervisor.

Generally the ROT definition covers all years. Sometimes a formula only applies to those employed on certain years or certain periods. Use the date boxes to indicate that

For “Before”, “From”, and “To”, the date is calculated in this manner:

$(\text{MONTH} - 1) \text{ divided by } 12 \text{ plus } \text{YEAR}.$

For “After”, the date is calculated in the following manner:

$\text{MONTH divided by } 12 \text{ plus } \text{YEAR}.$

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Age & Service Requirements (RAS), Date Requirements (DAT), Other Requirements (ROT), Annuity Length (LNG), Annuity Start Date (BEG), Formulas, and Other. The 'Other Requirements (ROT)' folder is expanded, showing sub-items ROT1, ROT2, and ROT3. The main area of the application shows the 'Other Requirements (ROT) [Plan: new]' dialog box. This dialog has a title bar with a close button. It contains a 'ROT Number' field with the value '1' and a 'Description' field. Below these is a section titled 'E3. Are there any other requirements for any of the benefits (ROT)?'. This section contains a list of checkboxes for various requirements: 'No Other Special Requirements' (checked), 'Employer Approval Required', 'Voluntary Contributions Required', 'Past Service Credit Required', 'VD Benefit Only if no Withdrawals of Mandatory Contributions', 'Disability Benefit Only for Employment Related Disabilities', 'Disability benefit Only for NON-Employment Related Disabilities', 'Disability benefits Only if Eligible for SS Benefits', 'Disability Benefit Only if NOT Eligible for SS Benefits', 'Death benefit Only for Employment Related Death', 'Death Benefit Only for Non-employment Related Death', and 'Death Benefit Only if Beneficiary Not Eligible for SS Benefits'. To the right of these checkboxes is a section titled 'Participation on Certain Dates' which contains four date selection fields: 'If Plan Participant On: 12 / 1999', 'If Plan Participant Before: 12 / 1999', 'If Plan Participant After: 12 / 1999', and 'If Plan Participant From: 12 / 1999 To: 12 / 1999'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:54 AM.

## Annuity Length (LNG)

This question asks how long the normal retirement benefit and supplemental payments last. Most benefits are lifetime benefits; however, some benefits may have a shorter duration. This section defines how long the benefit lasts (LNG). For instance, the plan may call for “bridge” payments designed to last only until the participant’s Social Security payments begin. Note “Reduced” Social Security payments are those that start at age 62. Unreduced payments start at Social Security normal retirement age (currently 65).

“Until Eligible for Normal Retirement Benefits” and “Until Eligible for Early Retirement Benefits” will often seem like appealing choices. Note that the actual implementation of these in the Pension Calculation program do not refer to the RASs of the particular plan. “Normal Retirement” and “Early Retirement” are defined as age 65 and age 62, respectively, for purposes of these options. It is best to avoid these options unless normal and/or early retirement dates for the plan actually correspond with these ages.

If an amount is paid in a lump sum, mark the “One Time Payment” option.

The screenshot displays the Pension Analyst software interface. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Age & Service Requirements (RAS), Date Requirements (DAT), Other Requirements (ROT), Annuity Length (LNG), Annuity Start Date (BEG), Formulas, and Other. The 'Sample Run' checkbox is checked. The main window shows the 'Annuity Length (LNG) [Plan: new]' dialog box. It contains the following fields and options:

- LNG Number: 1
- Description: (empty text box)
- Question text: **E4. Aside from lump-sum withdrawal options, are the retirement benefits and supplements paid on a regular basis for life, on a regular basis for some other specified time period, a one-time payment, or how long (LNG)?**
- Options (radio buttons):
  - For Life
  - For # Years: (text box)
  - Until Age: (text box)
  - After Age: (text box)
  - From Age: (text box) To Age: (text box)
  - One Time Payment
  - Until Eligible for SS Disability Benefits
  - Until Eligible for Early Retirement Benefits
  - Until Eligible for Normal Retirement Benefits
  - Death Benefit Lasts for Life Unless Spouse Remarries
- Sub-dialog box: LNG Depends on Social Security
  - Until Eligible for Social Security Benefits
  - After Eligible for Social Security Benefits
  - Reduced
  - Unreduced
  - Not Cited

At the bottom of the dialog are buttons for Add, Edit, Delete, and Close. The Windows taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:54 AM.

## Annuity Begins (BEG)

This section specifies when annuities begin (BEG). For instance, if a plan stated that a vested participant who left the firm could begin receiving a vested deferred benefit anytime they choose between 55 and 65, the eighth option will be chosen, and “55” and “65” would be typed in the related text boxes.

The screenshot shows the 'Pension Analyst' software interface. On the left is a tree view of variables including Actual Service Years (ASY), Final Average Pay (FAP), Mandatory Contributions (MAN), Voluntary Contributions (VOL), Potential Service Years (PSY), Social Security (SS), Reduction Factors (RED), Qualifications, Age & Service Requirements (RAS), Date Requirements (DAT), Other Requirements (ROT), Annuity Length (LNG), Annuity Start Date (BEG), Formulas, and Other. The 'BEG1' variable is selected under the 'Annuity Start Date (BEG)' folder.

The main window displays the 'Annuity Begins (BEG) [Plan: (new)]' dialog box. It has a 'BEG Number' field set to '1' and a 'Description' field. Below these is a question: 'E5. Do benefit payments begin at the time of the participant's employment termination, or do the payments begin at some later date (BEG)?'. There are ten radio button options for selecting when payments begin:

- ☐ Payments Begin at Time of Termination
- ☐ Payments Begin At Time of Disability
- ☐ Payments begin at Time of Death
- ☐ Payments Begin Anytime Participants Choose After Termination
- ☐ Payments Begin When Participant Reaches Age:
- ☐ Payments Begin Anytime Participants Choose After Age:
- ☐ Payments Begin Anytime Participants Choose Between Termination and Age:
- ☐ Payments Begin Anytime Participants Choose From Age:  To Age:
- ☐ Payments Begin When Participant's Age + ASY Reaches:
- ☐ Payments Begin When Participant Would Have Qualified for Normal Retirement
- ☐ Payments Begin When Participant Would Have Qualified for Early Retirement

At the bottom of the dialog box are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 11:01 AM.



## Retirement Formulas

### General Guidelines

- Only the variables defined in the plan can be used in the formulas. The one exception to this rule is AGE. AGE may be used as a variable when it enters into the calculation of benefits. Do not use AGE as a variable when age is the basis for choosing between formulas. This should be coded in the RAS eligibility section.
- If a formula includes a dollar amount that is periodically adjusted upward to account for inflation, prefix the amount with a dollar sign (\$). For instance, if the plan paid \$28 per year for years of service from 1990 to 1991, \$30 per year of service for years between 1992 and 1995 and \$32 for years after 1995, the formula would be:

$ASY1*28+ASY2*30+ASY3*\$32$

- If a formula uses a percentage write a percent sign (%) after the percentage amount.
- Allowable operators for addition, subtraction, multiplication, and division are: +, -, \*, and /.
- If you need to modify the natural order of operations, use parentheses (). Never use brackets [] to change the order of operations.
- Use brackets to indicate a range for terms within the formulas. The condition should immediately follow the term to which it refers. Less than or equal to is written “LE”. Greater than is written “>”. For example, a formula might be written:

$ASY1 * 3\% * FAP1 [FAP1 \text{ LE } \$20,000] +$   
 $ASY1 * 4\% * FAP1 [FAP1 > \$20,000]$

- MAX and MIN are allowable. For example, NRT#1 may be coded:

$MAX (NR1 \text{ OR } NR2 \text{ OR } NR3)$

- Each formula must contain no more than 120 characters.
- A total formula may not be referred to in a later formula if it contains more than one base formula with different specifications. For example, assume NR1 has age and service requirement, RAS1. Assume NR2 has age and service requirement, RAS2. RAS1 and RAS2 are different.  $NRT = MAX(NR1 \text{ OR } NR2)$ . Do not code ER1 as NRT, because NRT in this circumstance ignores the differences between RAS1 and RAS2.
- If a reduction is a percent, multiply RED in the formula. If it is a dollar amount, subtract RED in the formula.
- Do not put dollar signs (\$) in front of amounts that are not likely to increase with inflation.

- In general, code formulas as single life annuities. Ignore other payment forms, such as joint and survivor annuities. The one exception is the formula for death benefits. See the "Death Before Retirement" section below.

## Normal Retirement (NR) and Early Retirement (ER)

Note that before completing this form, all variables to be used in the formulas must already be defined, and all qualifications (RAS, DAT, ROT, LNG) to be used must be defined. If there is more than one formula, click the “Add” button after completing the first formula. The top label will then display “NR Formula #2”. Fill out the second formula.

When more than one formula is defined, there must be an indication of how the formulas are combined to determine the total NR or ER benefit. This is accomplished in a Total formula. On any formula form not labeled as the first formula, there is a check box to indicate the formula being entered is a Total formula. For instance if NR1 and NR2 are defined, the plan may define the total benefit as the maximum of those two benefits (written “MAX(NR#1 or NR#2)”) or the difference of those two benefits (written “NR#1 - NR#2”).

Sometimes, the plan does not clearly call a formula “Normal” or “Early”. Generally, define a formula as Early retirement only if there is a reduction factor involved in the calculation.

The screenshot displays the "Pension Analyst" software window. On the left is a tree view of the application's structure, including folders for Variables, Qualifications, and Formulas. The "Formulas" folder is expanded, showing sub-folders for Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). The main area of the window is titled "Normal Retirement Formulas [Plan: (new)]". It contains a text box for "NR Formula #:" with the value "1". Below this is a bold instruction: "Express the Normal retirement benefit and supplement formulas, including any other minimums or maximums on benefit amounts, using the terms defined in other questions (ASY, PSY, FAP, SS, RED, MAN, VOL) and standard notation." A large text box is provided for the formula, with a prompt: "Enter the appropriate qualifications for RAS, DAT, ROT and LNG in the boxed below. Then enter the formula (no more than 120 characters) in the box on the right." To the left of the formula box are four dropdown menus for qualifications: "RAS Not Selected", "DAT Not Selected", "ROT Not Selected", and "LNG Not Selected". At the bottom of the dialog are buttons for "Add", "Edit", "Delete", and "Close". The Windows taskbar at the bottom shows the Start button, several open applications including Microsoft Word, and the system clock indicating 11:01 AM.

## Vested Deferred Retirement (VD)

Vested Deferred retirement may start at termination or at some later date. To accommodate this variability in the onset of benefits, the Annuity Begins (BEG) qualification is introduced.

The screenshot displays the 'Pension Analyst' software interface. The main window is titled 'Vested Deferred Retirement Formulas [Plan: (new)]'. On the left, a tree view shows the hierarchy of variables and formulas. The 'Variables' folder is expanded, showing sub-folders for 'Actual Service Years (ASY)', 'Final Average Pay (FAP)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Potential Service Years (PSY)', 'Social Security (SS)', and 'Reduction Factors (RED)'. The 'Qualifications' folder is also expanded, showing 'Formulas' with sub-folders for 'Normal Retirement (NR)', 'Early Retirement (ER)', 'Vested Deferred Retirement (VD)', 'Disability Retirement (DR)', and 'Death & Survivor Benefits (DS)'. The 'VD' folder is selected, showing a list of formulas including 'VD1'. Below the tree view, there is a checkbox labeled 'Sample Run'. The main area of the window contains a text box for 'VD Formula #' with the value '1'. Below this, a bold instruction reads: 'VD1. Express the Vested Deferred retirement benefit and supplement formulas, including any other minimums or maximums on benefit amounts, using the terms defined in other questions (ASY, PSY, FAP, SS, RED, MAN, VOL) and standard notation.' To the right of this instruction is a large text area for entering the formula. Above the formula area, there are five dropdown menus for qualifications: 'RAS Not Selected', 'DAT Not Selected', 'ROT Not Selected', 'LNG Not Selected', and 'BEG Not Selected'. At the bottom of the window, there are buttons for 'Add', 'Edit', 'Delete', 'Close', and navigation arrows.

Pension Analyst

File Edit Options Window About

Variables

- Actual Service Years (ASY)
  - ASY1
- Final Average Pay (FAP)
  - FAP1
- Mandatory Contributions (MAN)
  - MAN7
- Voluntary Contributions (VOL)
  - VOL7
- Potential Service Years (PSY)
  - PSY1
- Social Security (SS)
  - SS1
- Reduction Factors (RED)
  - RED1

Qualifications

- Formulas
  - Normal Retirement (NR)
  - Early Retirement (ER)
  - Vested Deferred Retirement (VD)
    - VD1
  - Disability Retirement (DR)
  - Death & Survivor Benefits (DS)
- Other

☐ Sample Run

Save Cancel

Vested Deferred Retirement Formulas [Plan: (new)]

VD Formula #: 1

**VD1. Express the Vested Deferred retirement benefit and supplement formulas, including any other minimums or maximums on benefit amounts, using the terms defined in other questions (ASY, PSY, FAP, SS, RED, MAN, VOL) and standard notation.**

Enter the appropriate qualifications for DAT, ROT, LNG and BEG in the boxed below. Then enter the formula (no more than 120 characters) in the box on the right.

RAS Not Selected

DAT Not Selected

ROT Not Selected

LNG Not Selected

BEG Not Selected

Add Edit Delete Close

### Disability Retirement (DR) and Death & Survivor (DS) Formulas.

Disability and Death retirement refer to the disability or the death of the participant while still employed by the firm. In such circumstances, the firm often pays a retirement benefit to the participant or surviving spouse.

Disability benefits are sometimes paid for temporary and/or partial disability. Code here only disability benefits paid for total and permanent disability.

If a participant dies while employed, the firm often provides some form of joint and survivor benefit to the spouse. For example, the plan may state that on the death of the participant, the spouse will receive “the normal retirement benefit based on the deceased participant’s age and years of service at death, reduced by a factor to account for the joint nature of the benefit. This amount is further reduced by 50%.” What is described is a normal retirement benefit paid as a 50% joint and survivor annuity. Do not attempt to code the reduction factor or multiply by 50%. Simply code the normal retirement benefit. When the 50% joint and survivor option is checked in the Special Provisions section, this benefit will be automatically adjusted. Always use the 50% Joint & Survivor option if it is described.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', 'Disability Retirement (DR)' is expanded, showing a sub-item 'DR1'. The main area displays the 'Disability Retirement Formulas [Plan: new]' dialog box. It includes a 'DR Formula #' field with the value '1'. Below this is a text box with instructions: 'Express the Disability retirement benefit and supplement formulas, including any other minimums or maximums on benefit amounts, using the terms defined in other questions (ASY, PSY, FAP, SS, RED, MAN, VOL) and standard notation.' Further down, it says 'Enter the appropriate qualifications for RAS, DAT, ROT, LNG and BEG in the boxed below. Then enter the formula (no more than 120 characters) in the box on the right.' There are five dropdown menus for RAS, DAT, ROT, LNG, and BEG, all currently set to 'Not Selected'. To the right of these is a large empty text box for the formula. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word, PenUI - Microsoft Visual..., and Pension Analyst. The system clock shows 10:57 AM.

## Plan Information

The pension provider identification number (PPID) is the “SID” on the face of the SPD, and plan number (PLAN #) is the plan number specified in the administrative section of the plan. The plan number is a three-digit number used by the pension provider to identify a plan to the Department of Labor. Plan numbers generally run consecutively from 001. Governmental units, and some non-profit organizations are not required to report to the Department of Labor, and do not have plan numbers. If you do not find a plan number, you should arbitrarily assign plan numbers starting with 999, and decrement by one for each additional plan. So a state sponsoring three pension plans would have plan numbers 999, 998, and 997.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formula, and Other. Under 'Other', there are sub-items: General Plan Information, Special Provisions, Payouts, and Respondent. The main area shows the 'Plan Information (Plan: 3017)' window. This window has tabs for Identification, Eligibility, Maximum, Participation, Data Sources, and Comments. The 'Identification' tab is active, showing 'PLAN1. General Plan Characteristics'. The form contains the following fields:

- Pension Provider Name: Mobile Concrete, Inc. 401(k) Plan
- Pension Provider ID Number: 60241
- EIN: 83-0290650
- Plan Number: 1
- Recorder's ID: 25
- Date Finished: 04/01/2004
- Time to Complete (in Minutes): 30
- This Pension Plan Contains Additional Provisions for Post-retirement Health, Welfare, or Other Special Benefits: No

At the bottom of the window are buttons for 'Save', 'Cancel', 'Edit', and 'Close'. The Windows taskbar at the bottom shows the Start button, several open applications, and the system clock at 3:54 PM.

Some plans permit (or require) newly hired employees in covered groups to become plan participants effective the first day on the job; in such cases mark box 1, "YES". Other plans restrict eligibility to participate in the plan to employees who have attained a certain age and/or have been employed for a certain length of time; in such cases mark box 2, "NO".

Some plans have only one "plan entry date" per year. New participants must wait until that date to join the plan. In such cases, the amount of time the employee must wait will depend on the date of hire. For example, if the entry date is January 1st, an employee hired on December 30th will join the plan after one day of service while an employee hired on January 2nd will join after a year of service. In such cases, code the participation requirement as 6 months (the length of the average wait). Similarly, if the plan states that new employees become members on the January 1st following the first 12 month period in which they complete 1000 hours of service, code the participation requirement as 18 months.

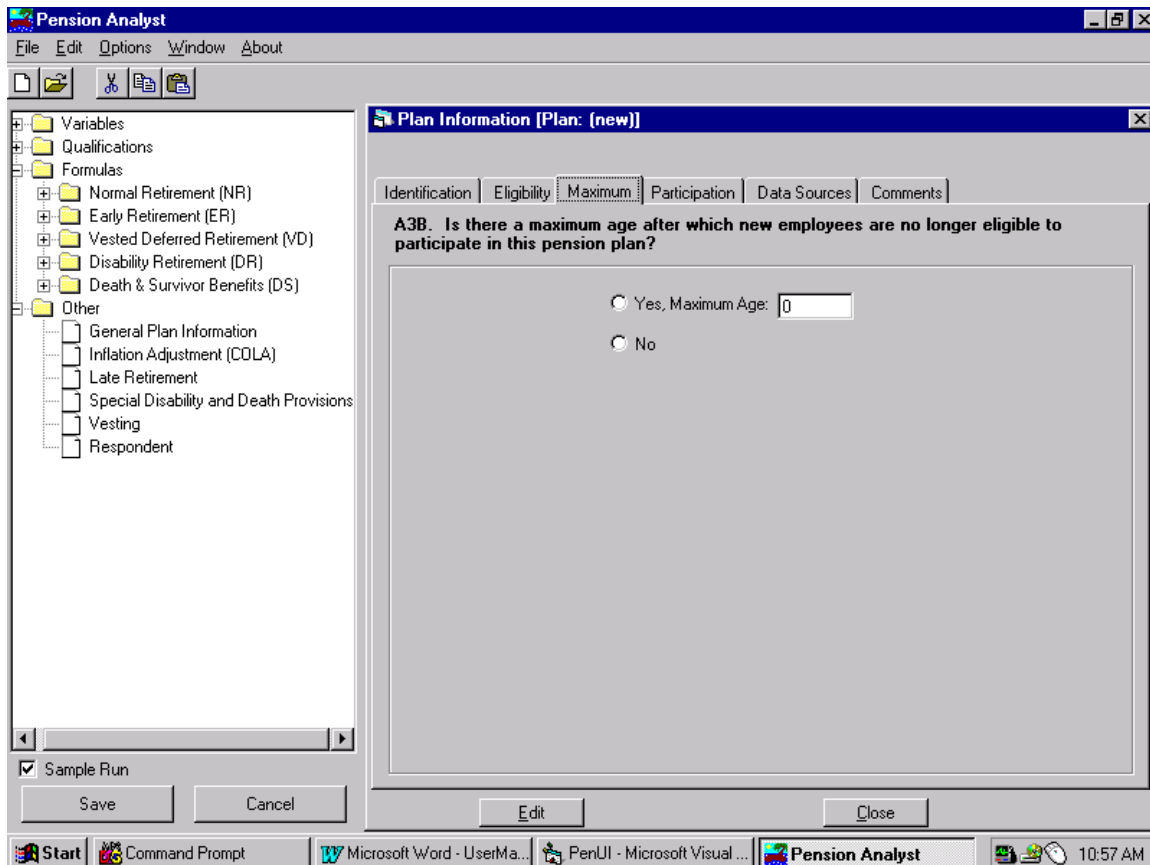
More general formula for computing the number of average wait:

$$\frac{1}{2} * (12 / \text{Number of entry dates in a year})$$

For this and all other questions in this section, code only these provisions that apply to a person who is hired currently. For the Plan Information section, do not code prior plan provisions.

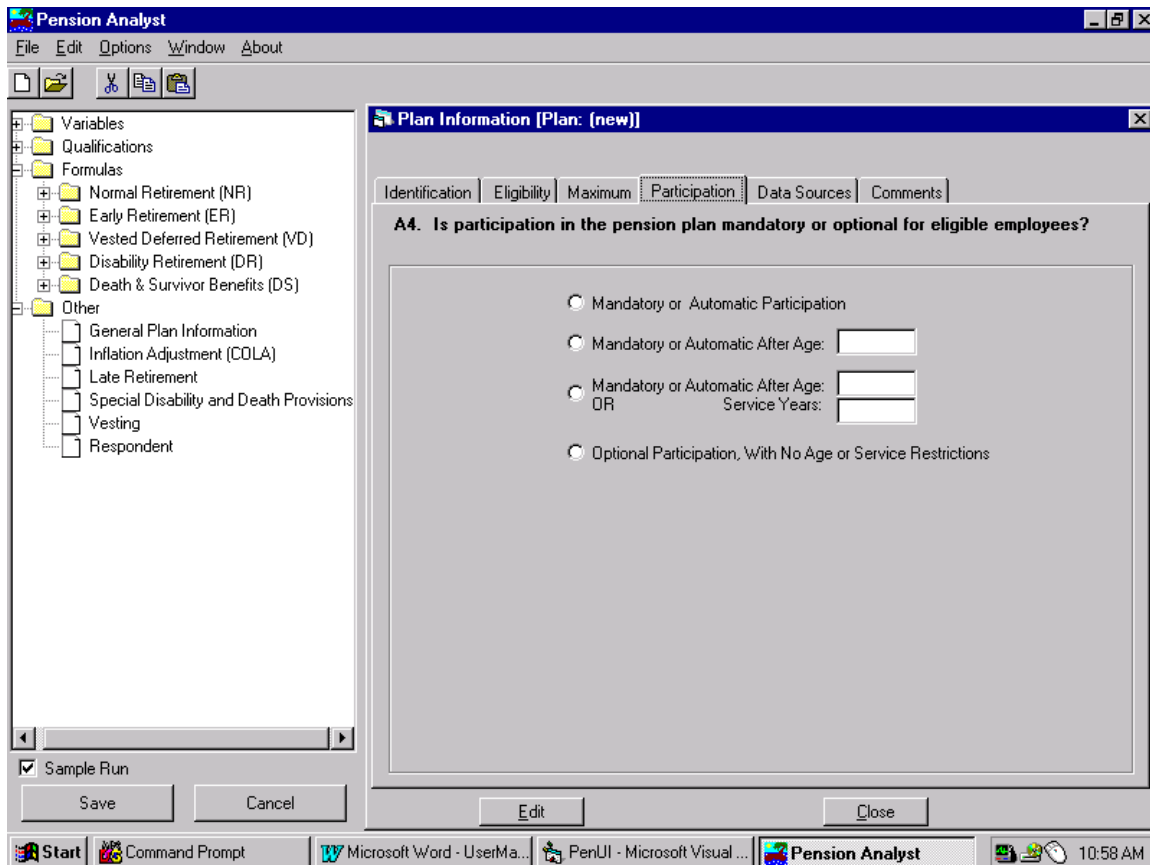
The screenshot shows the "Pension Analyst" software window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under Formulas, there are sub-categories: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under Other, there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The main area displays the "Plan Information [Plan: (new)]" dialog box. It has tabs for Identification, Eligibility, Maximum, Participation, Data Sources, and Comments. The "Eligibility" tab is selected, showing question A3: "Are all new employees in covered groups immediately eligible to participate in this pension plan? (Convert years to months where necessary)". There are four radio button options: "Yes" (selected), "No, Only After" (with an "Age:" field), "No, Only After Service:" (with a "Months" field), and "No, Only After OR" (with "Age:" and "Service:" fields). A fourth option "AND" is also present with "Age:" and "Service:" fields. At the bottom of the dialog are "Edit" and "Close" buttons. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:57 AM.

Some plans have a maximum age after which new employees are not eligible to participate in the plan. In such cases, mark the first option and write the maximum age in the blank.





If all employees participate in the plan as soon as they become eligible, without any discretion on their part, mark the first option. If participation is optional until a certain age, after which participation is automatic, mark the second option, and enter the age in the corresponding text box. If participation is optional until either the attainment of a certain age or length of service (i.e., the earlier of the two dates), after which participation is automatic, mark the third option, and fill in the related text boxes. If participation is optional for all eligible employees, mark the fourth option.



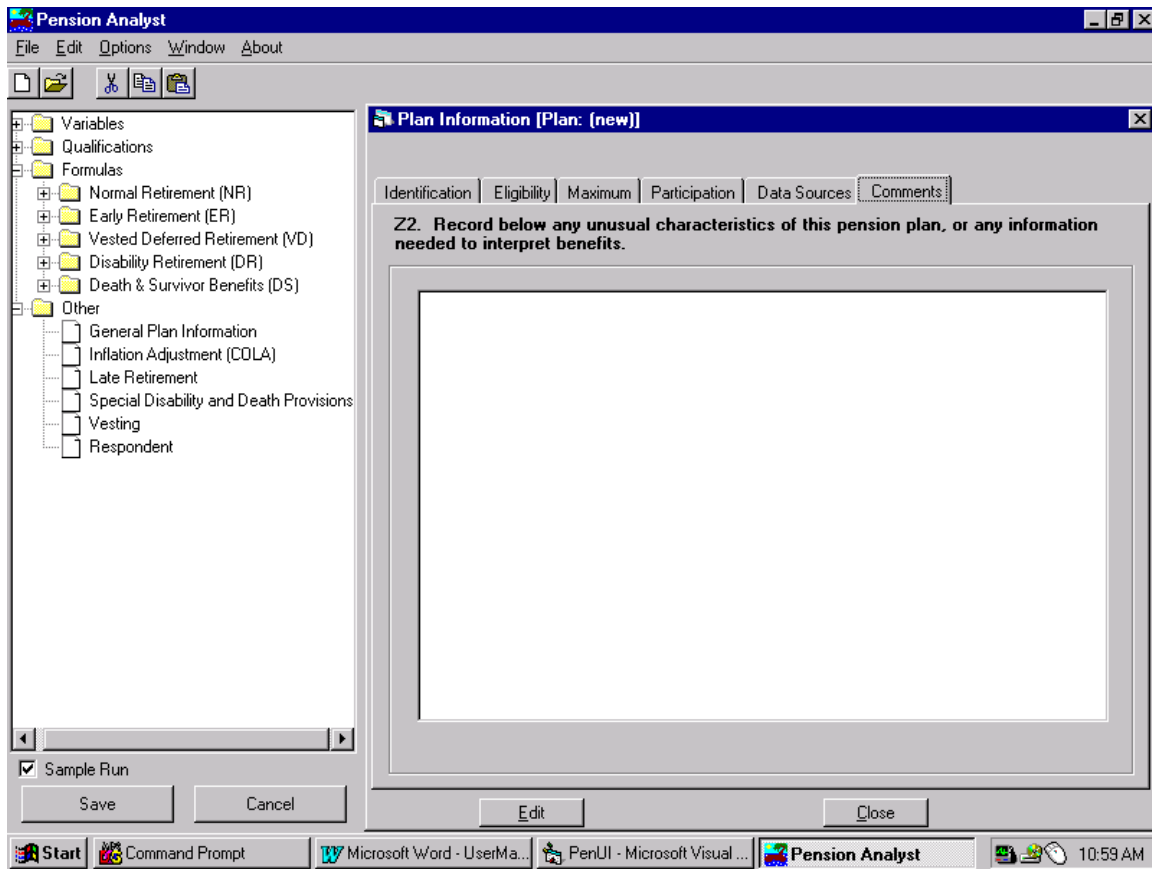
If the pension provider provided the SPD, mark the first option, and complete the blanks for effective date of plan and last amendment. If the Department of Labor provided the SPD, mark the second option, and complete the blanks for effective date of plan and last amendment. If Form 5500 was used, mark the third option, and fill in the date filed. It is important to associate some date with the plan in order to allow some indication to researchers of its vintage. If there is no explicit indication of effective date, or date of last amendment, look to other dates cited in the plan as an indication of the age of the plan.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', there are sub-items: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under 'Other', there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The main window displays the 'Plan Information [Plan: new]' dialog box. It has tabs for Identification, Eligibility, Maximum, Participation, Data Sources, and Comments. The 'Data Sources' tab is active, showing a section titled 'Z1. What are the data sources used? (Note: 1/1900 is interpreted as "Date Unavailable")'. This section contains several options with checkboxes and date pickers:
 

- ☐ SPD (Provider) with N/A and 12 / 1999 date pickers for Effective Date of Plan and Effective Date of Last Amendment.
- ☐ SPD (Department of Labor) with N/A and 12 / 1999 date pickers for Effective Date of Plan and Effective Date of Last Amendment.
- ☐ Form 5500 (and attachments) with N/A and 12 / 1999 date picker for Date Filed.
- ☐ Other plan documents (Describe) with N/A and 12 / 1999 date picker for Effective Date.

 Below the last option is a text box containing the number '0'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 10:58 AM.

If there is something unusual about this plan that you would particularly like a reviewer to consider, note that here.



## Cost of Living Adjustment (COLA)

Some plans provide an automatic cost of living adjustment (COLA). The first question asks how frequently retirement benefits are adjusted. If the plan states that the Board of Directors will review benefits, and adjust for inflation from time to time, do not fill out this section. This section is only meant to capture automatic adjustments.

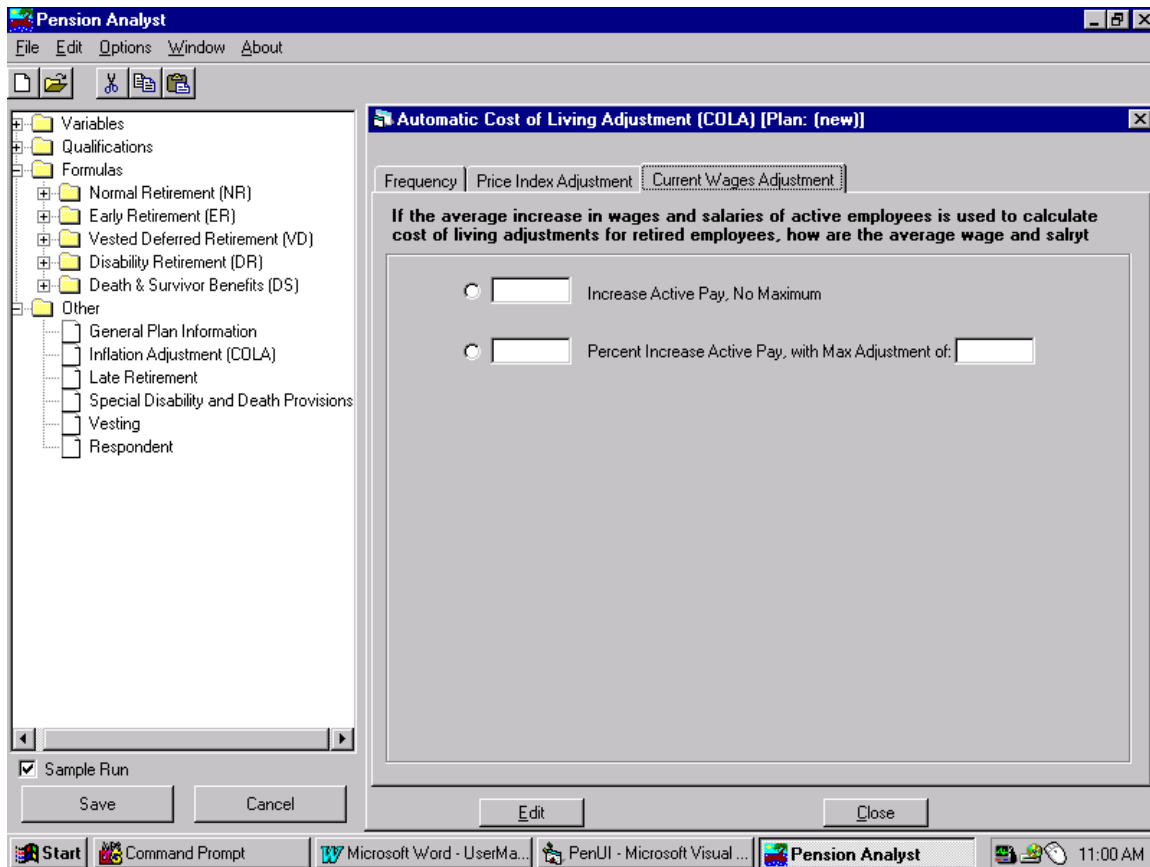
The screenshot shows the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', there are sub-items: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under 'Other', there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The 'Inflation Adjustment (COLA)' item is selected. The main window displays the 'Automatic Cost of Living Adjustment (COLA) [Plan: new]' dialog box. It has three tabs: 'Frequency', 'Price Index Adjustment', and 'Current Wages Adjustment'. The 'Frequency' tab is active, showing the question: 'F14. For firms with automatic cost of living adjustments to post-retirement benefits, what is the frequency of these cost of living adjustments (COLA)?'. Below the question are two radio button options: 'Every [ ] Months' and 'Every [ ] Years'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The taskbar at the bottom shows the Start button, Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., Pension Analyst, and a clock showing 10:59 AM.

Most plans providing COLA base their adjustment on a cost of living index. Indicate here how the price index is used to determine the automatic index. Leave this section blank if current wages are used to determine the adjustment.

Sometimes the benefit is automatically adjusted by a flat rate. For instance, the plan my state that benefits are increased by 3% each year. In such a situation, use the third option below and fill in the first text box with “4” and whatever the automatic increase is in the second box (“.03” in this example).

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', there are sub-items: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under 'Other', there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The 'Inflation Adjustment (COLA)' item is selected. The main window displays the 'Automatic Cost of Living Adjustment (COLA) [Plan: (new)]' dialog box. It has three tabs: 'Frequency', 'Price Index Adjustment', and 'Current Wages Adjustment'. The 'Price Index Adjustment' tab is active. The text inside the dialog reads: 'For firms using the consumer Price Index (CPI) or other price Index to calculate cost of living adjustments, how is the price index used to adjust these benefits?'. There are five radio button options, each followed by a text box for input: 1. Price Index Minus [ ] 2. [ ] of Increase in Price Index, No Max 3. [ ] of Increase in Price Index, With Max Adjustment of: [ ] 4. [ ] of Increase in Price Index, No Max if Index Increased by at Least: [ ] 5. [ ] of Increase in Price Index, with Max Adjustment of: [ ] if Index Increased by at Least: [ ] At the bottom of the dialog are 'Edit' and 'Close' buttons. The taskbar at the bottom shows the Start button, Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., Pension Analyst, and a clock showing 10:59 AM.

Less frequently cost of living adjustments are based on the increase in wages of active employees. In that case, fill in this page appropriately.



## Late Retirement (LR)

Although age discrimination legislation limits the ability of employers to force retirement of employees, there are still certain industries and jobs in which mandatory retirement is permitted. Code here any mandatory retirement age.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', there are sub-items: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under 'Other', there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The 'Late Retirement' item is selected. The main window shows a dialog box titled 'Late Retirement Adjustment [Plan: new]'. It has two tabs: 'Mandatory Retirement' (selected) and 'Late Adjustment Factor'. The dialog contains the question 'F1. Are participants in this plan subject to a mandatory retirement age?' with two radio button options: 'Yes, Mandatory Retirement Age of: [text box]' and 'No'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The main window has a 'Sample Run' checkbox (checked) and 'Save' and 'Cancel' buttons. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual..., and Pension Analyst. The system clock shows 11:00 AM.

If the benefit received at a retirement age later than normal is adjusted in some way, enter the adjustment here. Of course, later retirement means the participant would have more years of service and might have a higher final average pay, but those increments will be captured in the retirement formulas themselves. Code here only late retirement adjustments that will not be captured in the normal retirement formulas.

Use the first option for cases in which benefits are actuarially increased. First, mark whether the increase is a bonus paid for work after a specified age, after a specified number of years of service, or after accruing a specified number of "points" (calculated by summing age and service years). Next, enter the age, number of service years, number of "points", etc. in one of the blanks. The choice of blanks depends on whether there is some maximum after which further employment will not be rewarded with the "special adjustment." A mandatory retirement age should not be coded as a maximum here.

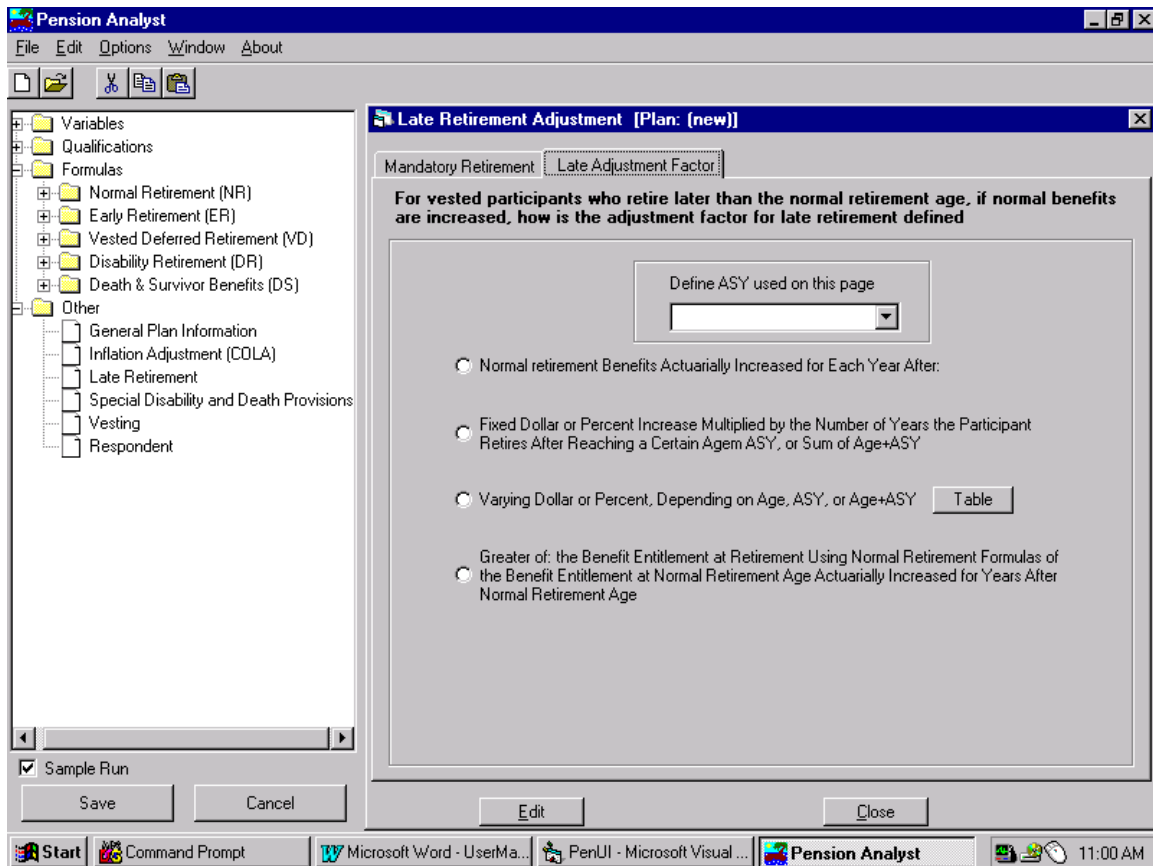
The second option is for adjustments in which a percentage or a dollar amount is multiplied by the number of years the participant works past a specified age, past a specified number of years of service, or after accruing a specified number of "points". Mark the appropriate boxes. Next, enter the dollar amount or percent as well as the age, number of service years, or number of "points" in the appropriate blanks below.

The third option is for adjustments based on a flat dollar amount or percentage increase. The dollar amount or the percentage depends on the employee's years of service, or number of "points". For example, a formula might pay an extra \$500 for each year the employee works between age 65 and age 70, and pay an additional \$300 for each year the employee works after age 70. Mark the boxes as described under the second option above.

The fourth option is for those instances in which a plan guarantees the maximum of the retiree's benefit using the normal formulas or the actuarial equivalent of the retiree's entitlement at normal retirement age.

Note that this question asks for adjustment rate per extra year, not month, of service.





## Special Provisions

This section incorporates miscellaneous special provisions of the pension plan. Here, not all tabs have to be filled out. If there are no disability provisions in the plan, do not code the first two tabs. If there are no death & survivor provisions in the plan, do not code the third and fourth tabs.

Ignore provisions for temporary or partial disability. Code only provisions related to total and permanent disability. Some firms will automatically vest participants who become disabled. If the plan has such a provision, note that here.

The screenshot displays the 'Pension Analyst' software interface. On the left is a tree view with categories: Variables, Qualifications, Formulas, Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), Death & Survivor Benefits (DS), and Other. The 'Other' category is expanded, showing sub-items: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The main window is titled 'Special Provisions DB [Plan: (new)]' and contains several tabs: 'Disable Vest', 'Disable Service', 'Death Vest', 'Death Service', 'Death LumpSum', 'Death LumpSum Paid', and 'Spouse Coverage'. The 'Disable Vest' tab is active, showing a question: 'F6. Does this pension plan include a provision that increases the vesting percentage for participants that were not fully vested at the time of disablement?'. Below the question is a dropdown menu labeled 'Define ASY used on this page' with 'ASY Not Selected' selected. There are seven radio button options for different vesting provisions, each with associated input fields for 'Age' and 'ASY'. The options are: 1. Increases to 100% at Time of Disablement; 2. Increased to 100% When Above Minimum (Age: [input]); 3. Increased to 100% When Above Minimum (ASY: [input]); 4. Increased to 100% When Above Minimum Age+ASY: [input]; 5. Increased to 100% When Above Minimum OR Above Minimum (Age: [input], ASY: [input]); 6. Increased to 100% When Above Minimum AND Above Minimum (Age: [input], ASY: [input]); 7. Vesting Percentage is Not Increased Above Amount Calculated at Time of Disablement. At the bottom of the window are 'Save', 'Cancel', 'Edit', and 'Close' buttons. The taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 11:01 AM.

The pension benefit is generally based on credited years of service. Some employers, in an effort to help employees who become totally and permanently disabled, allow employees to continue to accrue years of service even though they have retired due to disability, with the intent of paying a benefit at normal retirement age that is equal to the benefit they would have qualified for had they continued to work to normal retirement age. Code such provisions here.

**Pension Analyst**

File Edit Options Window About

Variables  
Qualifications  
Formulas  
Normal Retirement (NR)  
Early Retirement (ER)  
Vested Deferred Retirement (VD)  
Disability Retirement (DR)  
Death & Survivor Benefits (DS)  
Other  
General Plan Information  
Inflation Adjustment (COLA)  
Late Retirement  
Special Disability and Death Provisions  
Vesting  
Respondent

**Special Provisions DB [Plan: (new)]**

Disable Vest **Disable Service** Death Vest Death Service Death LumpSum Death LumpSum Paid Spouse Coverage

**F7. After disablement, does service credit continue to accrue until the participant would have been eligible for early or normal retirement benefits, or are no additional service years credited after the time of disablement?**

Define ASY used on this page  
ASY Not Selected

☐ Accrue One ASY for Each Year After Disabled, No Maximum

☐ Accrue One ASY for Each Year, To Maximum AGE:

☐ Accrue One ASY for Each Year, To Maximum ASY:

☐ Accrue One ASY for Each Year, To Maximum ADDITIONAL ASY:

☐ Accrue One ASY for Each Year, To Maximum Total AGE+ASY:

☐ Use Greater of Age at Death or AGE:

☐ Use Greater of ASY at Death or ASY:

☐ Use Greater of Age+ASY at Death or AGE+ASY:

☐ No Additional Service Years Credited

Sample Run  
Save Cancel Edit Close

Start Command Prompt Microsoft Word - UserMa... PenUI - Microsoft Visual ... Pension Analyst 11:01 AM

Some firms will automatically vest participants who die in service without being vested. If the plan has such a provision, note that here.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view with categories: Variables, Qualifications, Formulas, Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), Death & Survivor Benefits (DS), and Other. Under 'Other' are sub-items: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The main area is titled 'Special Provisions DB [Plan: (new)]' and contains several tabs: 'Disable Vest', 'Disable Service', 'Death Vest' (which is selected), 'Death Service', 'Death LumpSum', 'Death LumpSum Paid', and 'Spouse Coverage'. Below the tabs is a question: 'Does this pension plan include a provision that increases the vesting percentage for participants that were not fully vested at the time of death?'. A dropdown menu labeled 'Define ASY used on this page' shows 'ASY Not Selected'. Below this are seven radio button options: 1. 'Increases to 100% at Time of Death' (selected). 2. 'Increased to 100% When Above Minimum' with an 'Age:' input field. 3. 'Increased to 100% When Above Minimum' with an 'ASY:' input field. 4. 'Increased to 100% When Above Minimum Age+ASY:' with an input field. 5. 'Increased to 100% When Above Minimum OR Above Minimum' with 'Age:' and 'ASY:' input fields. 6. 'Increased to 100% When Above Minimum AND Above Minimum' with 'Age:' and 'ASY:' input fields. 7. 'Vesting Percentage is Not Increased Above Amount Calculated at Time of Death'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The taskbar at the bottom shows 'Start', 'Command Prompt', 'Microsoft Word - UserMa...', 'PenUI - Microsoft Visual ...', 'Pension Analyst', and a clock showing 11:01 AM.

The pension benefit is generally based on credited years of service. Some employers, in an effort to help spouses of employees who dies in service, allow pensions to grow as if the participant were still alive and working. Code such provisions here.

**Pension Analyst**

File Edit Options Window About

Variables

Qualifications

Formulas

Normal Retirement (NR)

Early Retirement (ER)

Vested Deferred Retirement (VD)

Disability Retirement (DR)

Death & Survivor Benefits (DS)

Other

General Plan Information

Inflation Adjustment (COLA)

Late Retirement

Special Disability and Death Provisions

Vesting

Respondent

**Special Provisions DB (Plan: [new])**

Disable Vest Disable Service **Death Vest** **Death Service** Death LumpSum Death LumpSum Paid Spouse Coverage

**F10. After the participant's death, does service credit continue to accrue until the participant would have been eligible for early or normal retirement benefits, or are no additional service years credited after the time of death?**

Define ASY used on this page

ASY Not Selected

☐ Accrue One ASY for Each Year After Death, No Maximum

☐ Accrue One ASY for Each Year, To Maximum AGE:

☐ Accrue One ASY for Each Year, To Maximum ASY:

☐ Accrue One ASY for Each Year, To Maximum ADDITIONAL ASY:

☐ Accrue One ASY for Each Year, To Maximum Total AGE+ASY:

☐ Use Greater of Age at Death or AGE:

☐ Use Greater of ASY at Death or ASY:

☐ Use Greater of Age+ASY at Death or AGE+ASY:

☐ No Additional Service Years Credited

Sample Run

Save Cancel

Edit Close

Start Command Prompt Microsoft Word - UserMa... PenUI - Microsoft Visual ... Pension Analyst 11:01 AM

Some organizations, in an effort to defray expenses at death, provide a lump sum payment when a retired employee dies. If the plan provides such a benefit, note here the kinds of retirement covered by a lump sum payment.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formulas, Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), Death & Survivor Benefits (DS), and Other. The 'Other' category is expanded, showing sub-items: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The main area displays the 'Special Provisions DB (Plan: [new])' dialog box. This dialog has a tabbed interface with tabs: Disable Vest, Disable Service, Death Vest, Death Service, **Death LumpSum** (selected), Death LumpSum Paid, and Spouse Coverage. The 'Death LumpSum' tab contains the text: 'F20. If this pension includes any lump-sum benefit payments upon the death of a retired participant (excluding survivor benefits), under which retirement circumstances are the death benefit payments made?'. Below this text are five unchecked checkboxes: Normal Retirement, Late Retirement, Early Retirement, Vested Deferred Retirement, and Disability Retirement. At the bottom of the dialog are 'Edit' and 'Close' buttons. The application's status bar at the bottom shows the Windows taskbar with icons for Start, Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., Pension Analyst, and a clock showing 11:02 AM.

If a lump sum payment is indicated on the prior tab, indicate here how the lump sum is determined.

The screenshot displays the 'Pension Analyst' application window. The main menu bar includes 'File', 'Edit', 'Options', 'Window', and 'About'. Below the menu is a toolbar with icons for file operations. On the left is a tree view with the following structure:

- Variables
- Qualifications
- Formulas
  - Normal Retirement (NR)
  - Early Retirement (ER)
  - Vested Deferred Retirement (VD)
  - Disability Retirement (DR)
  - Death & Survivor Benefits (DS)
- Other
  - General Plan Information
  - Inflation Adjustment (COLA)
  - Late Retirement
  - Special Disability and Death Provisions
  - Vesting
  - Respondent

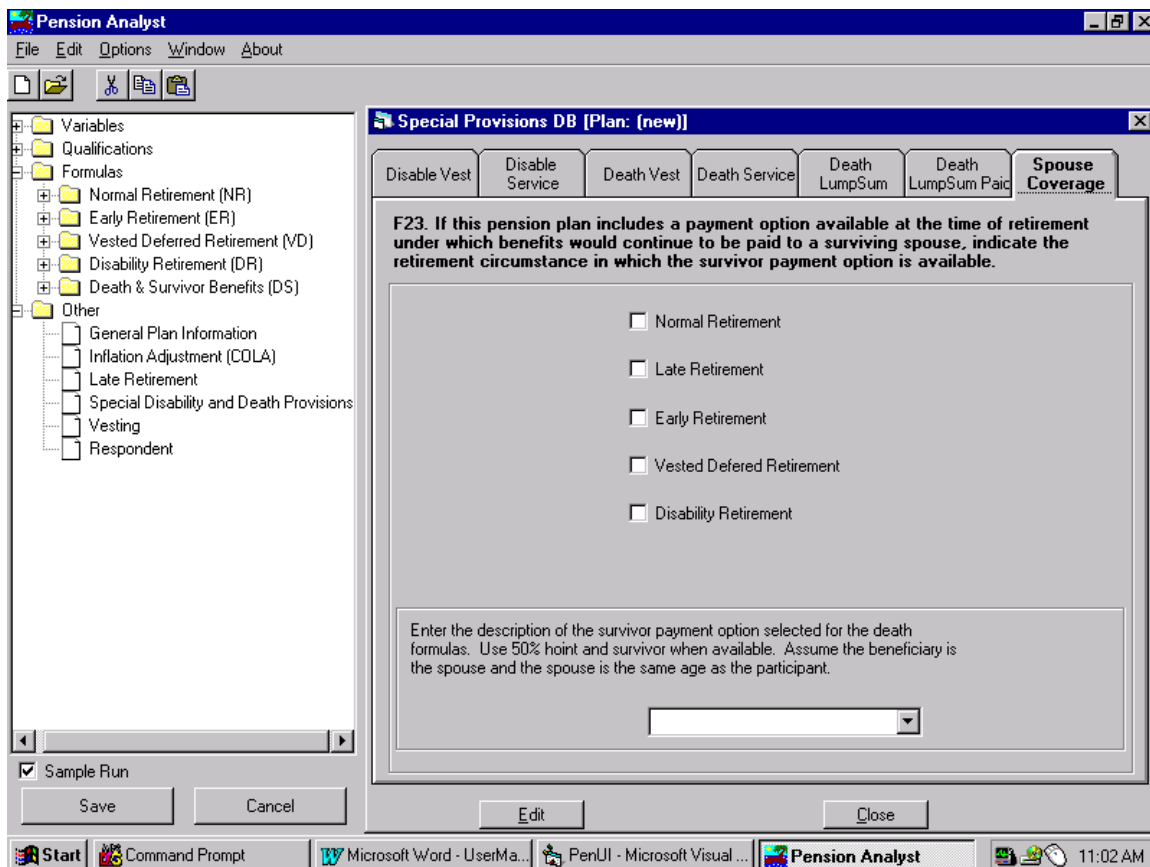
The main window is titled 'Special Provisions DB [Plan: (new)]'. It features a tabbed interface with the following tabs: 'Disable Vest', 'Disable Service', 'Death Vest', 'Death Service', 'Death LumpSum', 'Death LumpSum Paid', and 'Spouse Coverage'. The 'Death LumpSum Paid' tab is currently selected. The main content area displays the question: 'F21. How are the lump-sum benefits calculated for a retired participant?'. Below this question are two radio button options, each followed by a text input field:

- ☐ Fixed Dollar Amount: [ ]
- ☐ Fixed Percent of Benefits: [ ]

At the bottom of the window are buttons for 'Save', 'Cancel', 'Edit', and 'Close'. The Windows taskbar at the bottom shows the 'Start' button and several open applications: 'Command Prompt', 'Microsoft Word - UserMa...', 'PenUI - Microsoft Visual ...', and 'Pension Analyst'. The system clock indicates the time is 11:02 AM.

Although formulas coded in this application are assumed to define benefits that last only as long as the retired participant lives, firms generally provide annuity options that provide a reduced benefit for a joint annuity. A joint annuity is one that is paid as long as either spouse is living. A 100% joint and survivor annuity would provide the same benefit to the spouse after the former employee had died. This benefit would continue to the surviving spouse for their lifetime. A 50% joint and survivor annuity reduces the benefit paid by 50% once the former employee dies. Mark here which retirement types allow joint and survivor options.

In the bottom area, enter the type of survivor option used in the death formulas. Always use the 50% joint and survivor option if that option is provided.





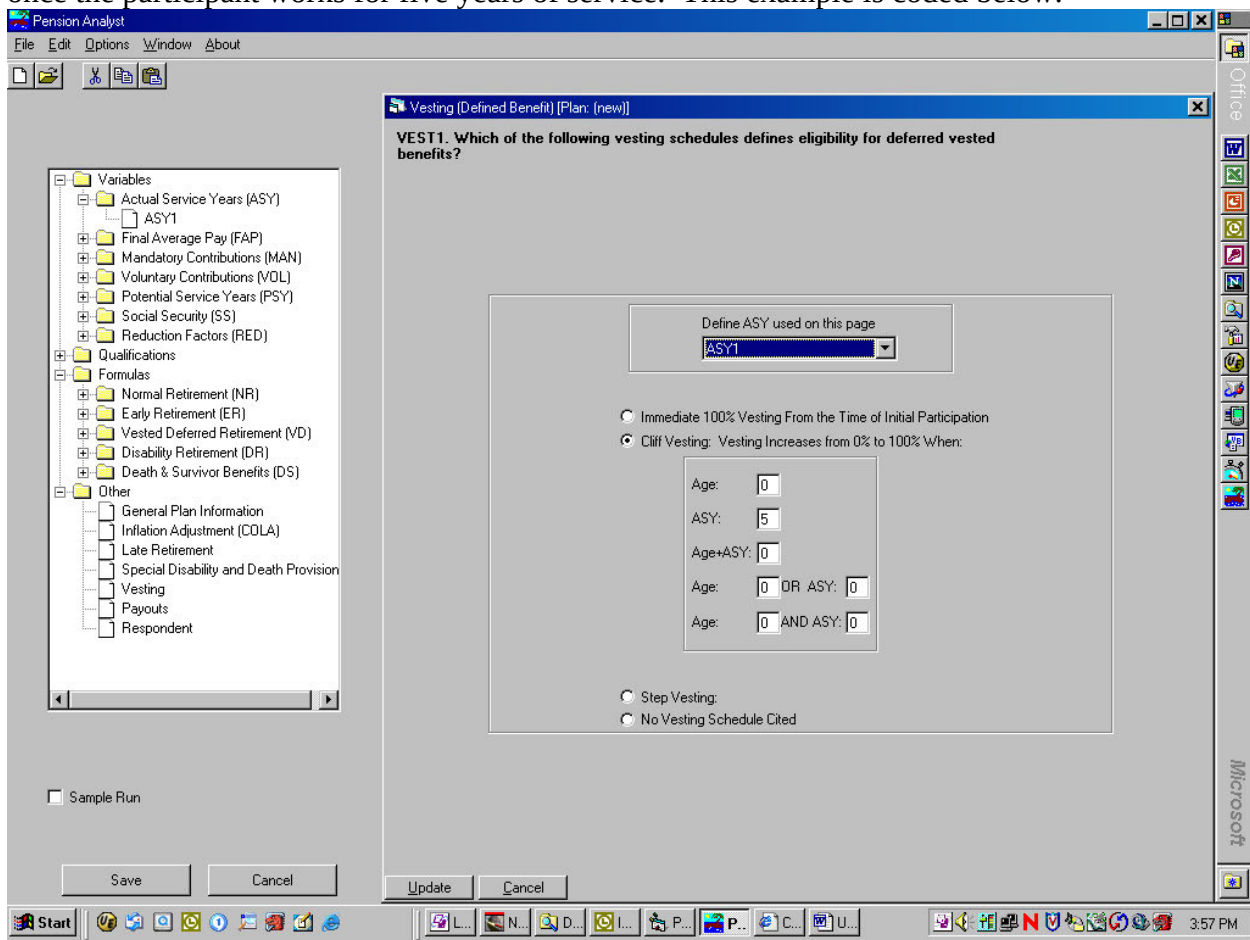
## Vesting

Typically, a participant must stay with a company for a certain period of time before earning a non-forfeitable right to a pension benefit. Those provisions will be entered here. Sometimes, participants are immediately vested from their first date of participation in the plan. In that case, mark the first option. The term “cliff vesting” refers to a milestone that must be passed. Before that milestone is passed, the participant is zero percent vested. After the milestone, the participant is 100% vested.

The term “step vesting” refers to a more gradual process of vesting in which, over a period of years, the participant’s vesting percent increases until the participant is 100% vested.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formulas, and Other. Under 'Formulas', there are sub-items: Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS). Under 'Other', there are: General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent. The 'Vesting' item is selected. The main area displays the 'Vesting (Defined Benefit) [Plan: (new)]' dialog box. It asks: 'Which of the following vesting schedules defines eligibility for deferred vested benefits?'. At the top, there is a section 'Define ASY used on this page' with a dropdown menu showing 'ASY Not Used'. Below this are four radio button options: 'Immediate 100% Vesting From the Time of Initial Participation', 'Cliff Vesting: Vesting Increases from 0% to 100% When:', 'Step Vesting:', and 'No Vesting Schedule Cited'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The Windows taskbar at the bottom shows the Start button, Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., Pension Analyst, and a clock showing 11:02 AM.

Cliff vesting generally occurs after reaching a specific milestone, generally a specific age or number of years of service. A very common cliff vesting provision is to provide 100% vesting once the participant works for five years of service. This example is coded below.



The step vesting schedule looks more complex, but is really very simple. Suppose a plan provides that a participant will be 30% vested after 3 years of service, 60% vested after 5 years of service and 100% vested after 7 years of service. The ASY used would be selected in the “Define ASY used on this page” list, “.3” and “.6” would be entered in the “Begins at:” and “Reaches:” text boxes, and “3”, “5” and “7” would be entered in the three “ASY:” text boxes below.

Note that this instrument can only accommodate 3-step vesting schedule. Sometimes vesting schedule has more than 3 steps. For example, it may look like this:

| Years Of Service | Vesting Percentage |
|------------------|--------------------|
| Less than 2      | 0%                 |
| 2                | 20%                |
| 3                | 40%                |
| 4                | 60%                |
| 5                | 80%                |
| 6 or more        | 100%               |

In this case, enter 0.2 in “**Begins at**” textbox , 0.4 in “**Reaches**” textbox and 2, 4 and 6 in corresponding “ASY” textboxes. You can pick any middle step from the actual vesting schedule.

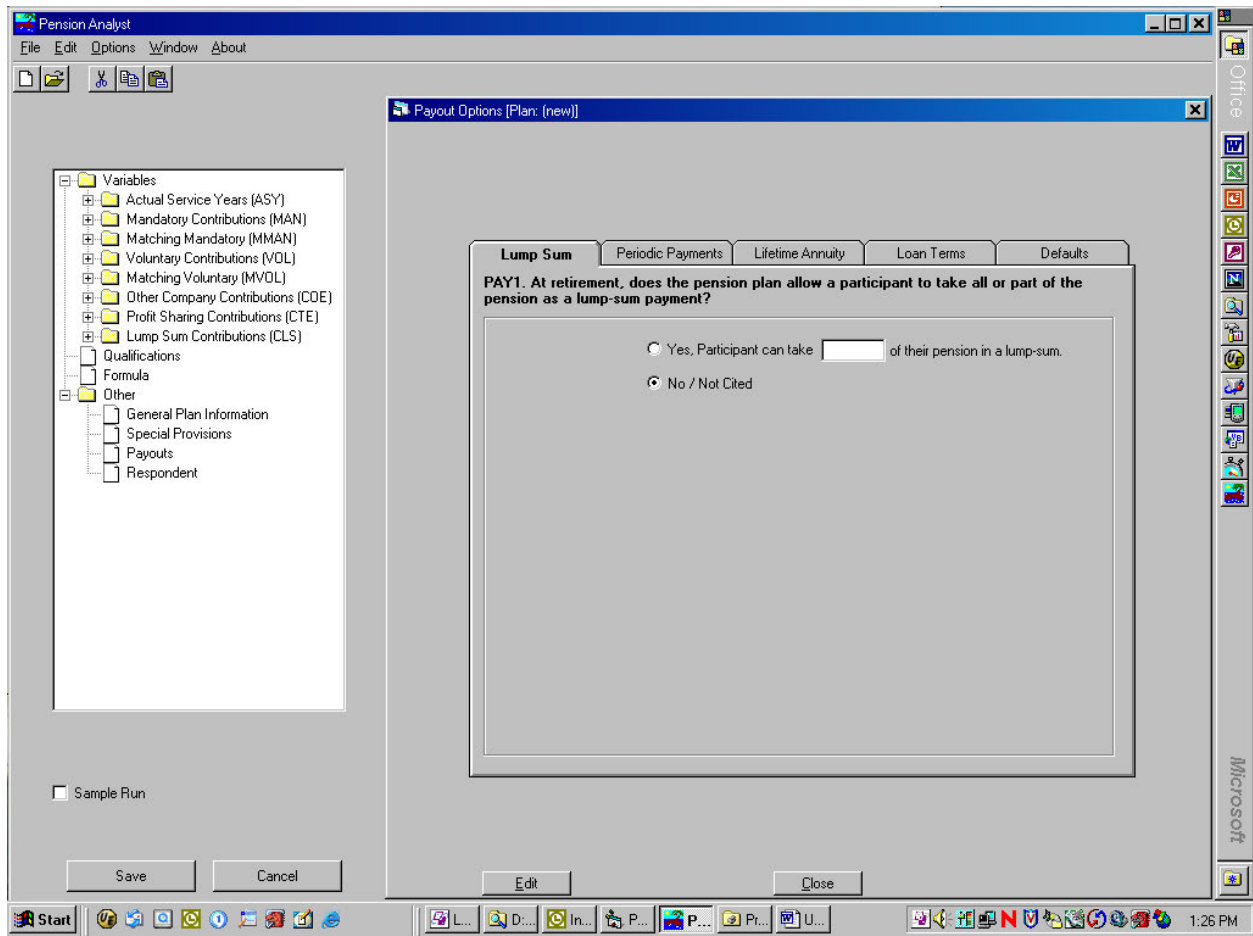
Enter here the respondent identification numbers for the plan. It is vitally important that these numbers are transcribed correctly. Please check them carefully!

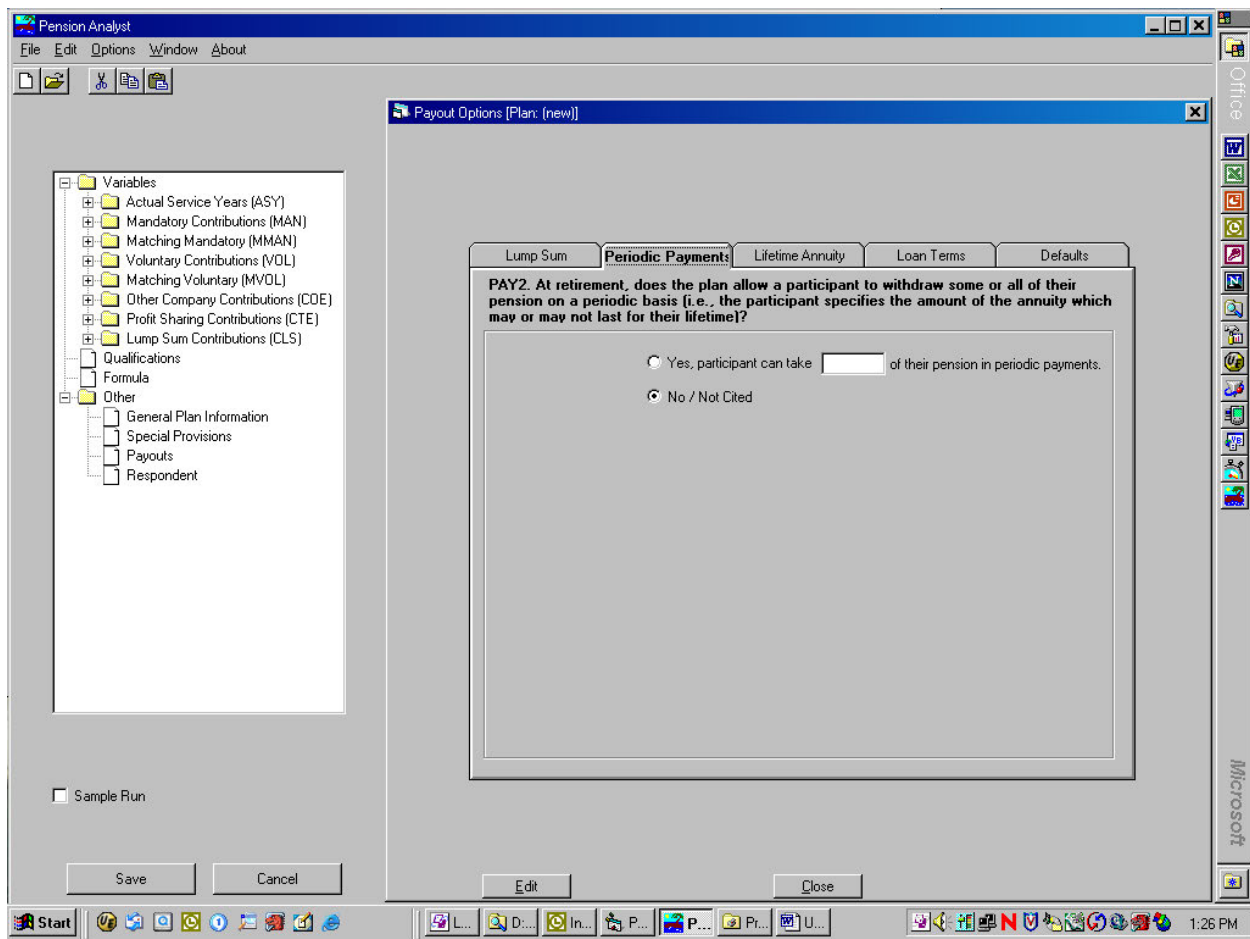
The screenshot shows the 'Pension Analyst' application window. On the left is a tree view with categories: Variables, Qualifications, Formulas (containing Normal Retirement (NR), Early Retirement (ER), Vested Deferred Retirement (VD), Disability Retirement (DR), and Death & Survivor Benefits (DS)), and Other (containing General Plan Information, Inflation Adjustment (COLA), Late Retirement, Special Disability and Death Provisions, Vesting, and Respondent). The 'Respondent' item is selected. The main area displays a dialog box titled 'Respondent IDs [Plan: (new)]' with the instruction 'Enter the Respondent IDs associated with this plan.' Below this is a grid of 15 rows and 8 columns. The first cell of the first row contains the number '0'. At the bottom of the dialog are 'Edit' and 'Close' buttons. The main application window has a menu bar (File, Edit, Options, Window, About) and a toolbar. At the bottom of the application window are 'Save' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button and several open applications: Command Prompt, Microsoft Word - UserMa..., PenUI - Microsoft Visual ..., and Pension Analyst. The system clock shows 11:05 AM.

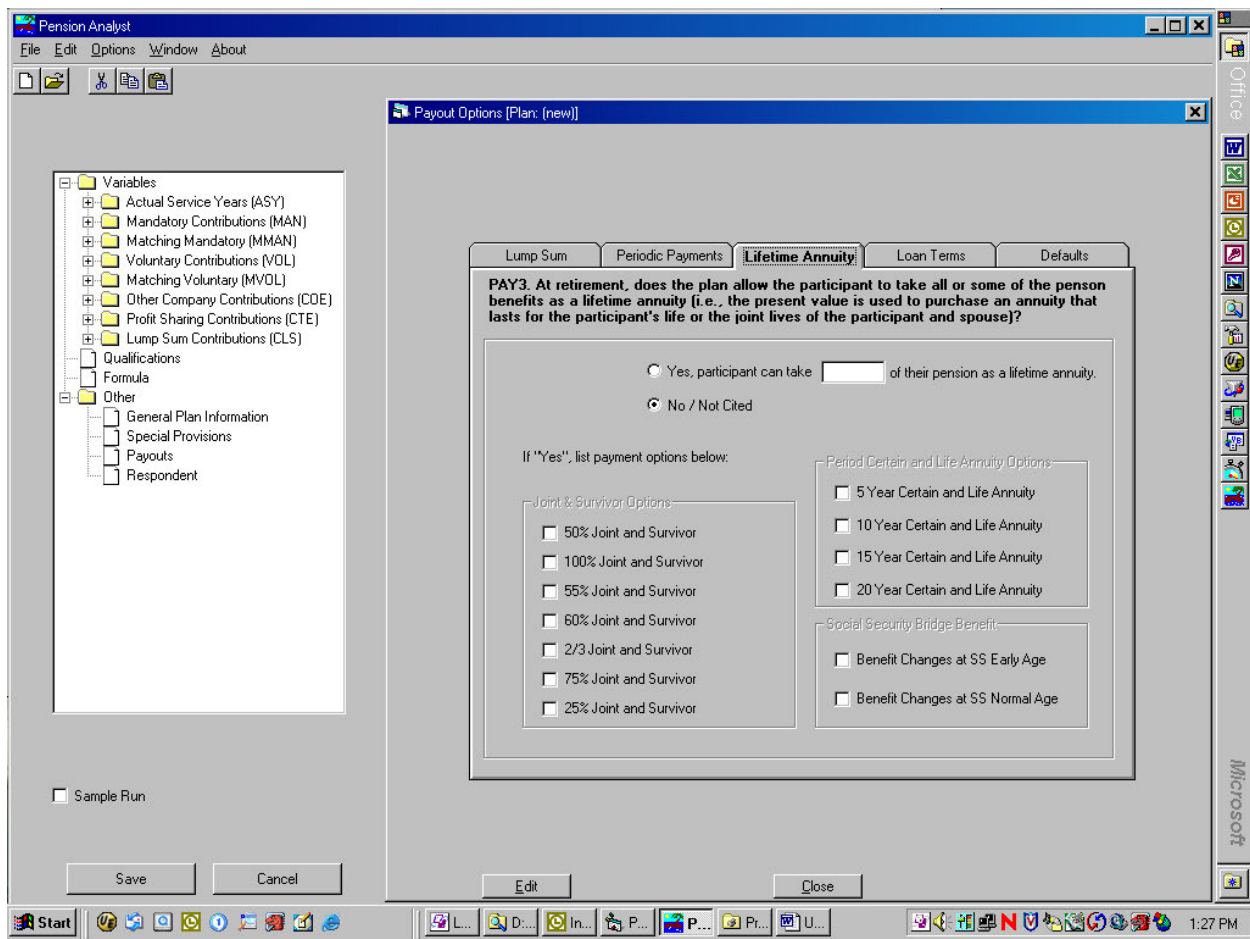
| Respondent IDs [Plan: (new)] |  |  |  |  |  |  |  |
|------------------------------|--|--|--|--|--|--|--|
| 0                            |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |
|                              |  |  |  |  |  |  |  |



## Payouts









Pension Analyst

File Edit Options Window About

Payout Options [Plan: (new)]

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other
  - General Plan Information
  - Special Provisions
  - Payouts
  - Respondent

☐ Sample Run

Save Cancel

Lump Sum Periodic Payments Lifetime Annuity **Loan Terms** Defaults

**PAY4. Prior to retirement, does the plan allow a participant to borrow money from their pension accumulation?**

☐ Yes, participant can borrow at their discretion.  
☐ Yes, but borrowing only allowed for hardship or other restrictive circumstances.  
☒ No / Not Cited

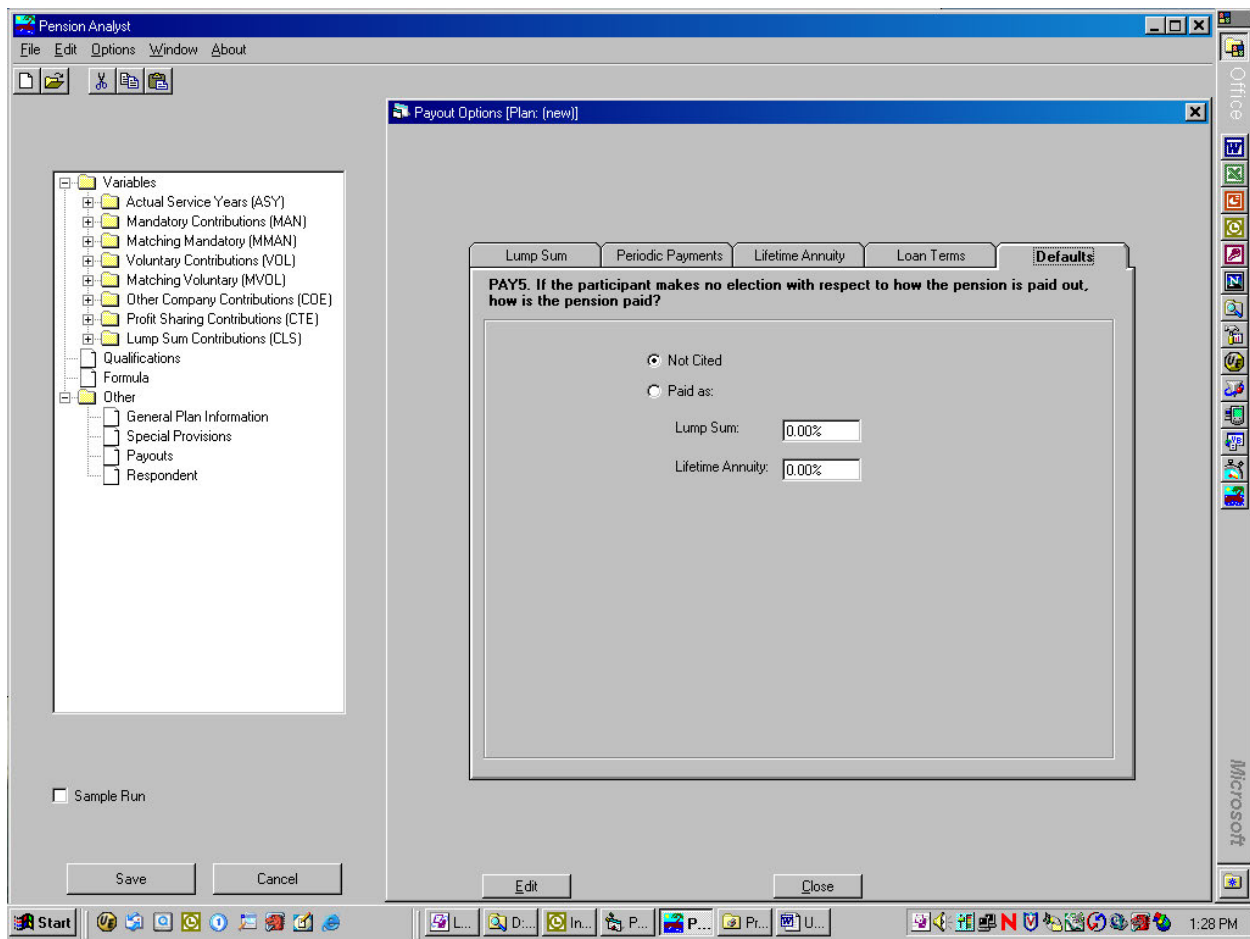
If "Yes", list loan amount limitations, term and interest rate provisions below.

| Borrowing Limitations                                                                                                                                                                                                                                                                      | Term Provisions                                                                                                                                                                                                                                                             | Interest Rate Provisions                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="radio"/> None Cited<br><input type="radio"/> Dollar Amount: <input type="text"/><br><input type="radio"/> % of Balance: <input type="text"/><br><input type="radio"/> Minimum of<br>Dollar Amount <input type="text"/><br>OR<br>% of Balance: <input type="text"/> | <input checked="" type="radio"/> None Cited<br><input type="radio"/> Minimum / Maximum Term<br>Minimum Term in Years: <input type="text" value="0"/><br>Maximum Term in Years: <input type="text" value="0"/><br>Maximum term for Home Loan: <input type="text" value="0"/> | <input checked="" type="radio"/> None Cited<br><input type="radio"/> Fixed Rate Based on Reference Rate at Time of Loan<br><input type="radio"/> Fixed Rate of: <input type="text" value="0.00%"/><br><input type="radio"/> Variable Rate Over Term of Loan |

Edit Close

Start

1:28 PM



## Mandatory Contributions in a DC plan (MANDC)

Although the employer generally bears a substantial part of the cost, defined contribution plans often require participants to contribute toward their plan. Some plans specify that contributions may vary within a certain range (e.g., 3 to 8 percent). We treat this as a case in which there are two contributions: a mandatory contribution of 3 percent, and a voluntary contribution of up to 5 percent.

There are two options to be checked. If the plan mentions that contributions are taken out on a Pre-tax basis (i.e., the employee does not have to pay taxes on their contributions), mark the “Pre-tax” option. If the plan cites Post-tax, mark “Post-tax.” Otherwise, mark “Not Cited”.

Then mark the option that best describes the amount of the mandatory contribution. For instance, a plan may call for a 6% contribution on the part of the employee. If no maximum dollar amount is mentioned, mark the second option, write “.06” in first text box and “999999” in the second text box to indicate that there is no maximum. Occasionally, the contribution is expressed as a sliding scale. In that case, press the “Table” button.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area shows the 'Mandatory Contributions (MAN) [Plan: new]' dialog box. It has fields for 'MAN Number' and 'Description'. Below these are tabs for 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'How Defined' tab is active, showing the question: 'MANDC1. On an annual basis, how is the mandatory contribution (MAN) calculated?'. There are three radio button options: 'Pre-Tax', 'Post-Tax', and 'Not Cited'. The 'Not Cited' option is selected. To the right of these is a button labeled 'Define ASY used on this page'. Below the radio buttons are several options for how the contribution is calculated: 'Fixed Dollar Amount', 'Fixed Percentage of up to Maximum', 'Fixed Percentage of Pay at or Below SSWB', 'Fixed Percentage of Pay Above SSWB', 'Fixed Percentage of Pay Above SSWB up to Maximum', and 'Varying Dollar or Percentage'. The 'Fixed Percentage of up to Maximum' option is selected. It has two text boxes: 'Pay' with '6.00%' and 'Contribution' with '\$999,999'. There is also a 'Table' button. At the bottom of the dialog are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 4:31 PM.

The use of the variable rate table can be demonstrated with an example. A plan may call for a contribution of 5% on the first \$20,000 of income, a contribution of 6% on any income between \$20,000 and \$30,000, and a contribution of 7% of income above \$30,000. This provision would be represented as follows. Note that the right hand ranges must be contiguous. If a plan requires a 5% contribution on the first \$20,000 of income and also requires a 7% contribution on income over \$30,000, two MANs should be entered to capture the provisions.

**Pension Analyst**  
File Edit Options Window About

**Variable Rate Contribution**

☐ Dollar Amount  
☒ Percentage of Pay  
☐ Percentage of (Pay > SSWB)  
☐ Percentage of (Pay <= SSWB)

☒ Pay  
☐ Age  
☐ ASY  
☐ Age + ASY

5.00% Under (No MIN): \$20,000  
 From (MIN):  
 To:

6.00% From: \$20,000  
 To: \$30,000

7.00% Over (No MAX): \$30,000

Close

☒ Varying Dollar or Percentage: Table

☒ Sample Run  
 Save Cancel

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 10:27 AM

If the option marked on the prior tab involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Mandatory Contributions (MAN)' folder is expanded, showing a sub-item 'MAN1'. The main area of the window is titled 'Mandatory Contributions (MAN) [Plan: (new)]'. It contains a 'MAN Number' field with the value '1' and a 'Description' field. Below these are tabs for 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'SSWB' tab is selected, showing a question: 'M2A. Do this mandatory contribution depend on the Social Security Taxable Wage Base (SSWB)?'. There are four radio button options: 'Yes, Actual SSWB in Effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year: [text box]', and 'No'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and several open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '10:27 AM'.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
  - MAN1
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

Sample Run

Save Cancel

**Mandatory Contributions (MAN) [Plan: (new)]**

MAN Number: 1 Description:

How Defined SSWB Dates Start Max Age Type

**M2A. Do this mandatory contribution depend on the Social Security Taxable Wage Base (SSWB)?**

☐ Yes, Actual SSWB in Effect Each Year

☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year: [text box]

☐ No

Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 10:27 AM

Generally the MAN definition covers all years. Sometimes a mandatory contribution was instituted only after a certain date, or it was discontinued after a certain date. Enter here any date limitations on the mandatory contribution.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)' (with a sub-folder 'MAN1'), 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Mandatory Contributions (MAN) [Plan: (new)]'. It includes a 'MAN Number' field with '1' and a 'Description' field. Below these are tabs: 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'Dates' tab is active, showing a question: 'M2B. Is this mandatory contribution based on wages and salaries earned during specific calendar time periods, or during all years covered by this pension plan?'. There are four radio button options: 'Covers all years: no specific dates cited.' (selected), 'Before: 12/1999', 'After: 12/1999', and 'From: 12/1999 To: 12/1999'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Close', and navigation arrows. A 'Sample Run' checkbox is checked, with 'Save' and 'Cancel' buttons below it. The Windows taskbar at the bottom shows 'Start', 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', 'Pension Analyst', and a clock showing 10:27 AM.

Some plans require that employees begin to make contributions when they begin to work for the firm. In such cases mark the first option. In other plans contributions are required only of employees who have worked for the firm for a certain length of time, or who have attained a certain age. In such cases mark the correct option, and fill in the blanks with the appropriate information concerning age and/or years of service.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Mandatory Contributions (MAN)' folder is expanded, showing a sub-item 'MAN1'. Below the tree view are checkboxes for 'Sample Run', 'Save', and 'Cancel'. The main window displays the 'Mandatory Contributions (MAN) [Plan: (new)]' dialog box. It has tabs for 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'Start' tab is selected, showing the question 'M2C. When are participants required to start making this mandatory contribution?'. There are five radio button options: 'At Onset of Employment', 'After Employee reaches' (with an 'Age:' input field), 'After Employee Completes First # Years:' (with a '# YRS:' input field), 'After Employee Reahces OR After Completes First' (with 'Age:' and '# YRS:' input fields), and 'After Employee Reaches AND After Completes First' (with 'Age:' and '# YRS:' input fields). At the bottom of the dialog are 'Add', 'Edit', 'Delete', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button, open applications (PenUI - Microsoft Visual B..., Microsoft Word - UserMan...), and the Pension Analyst application, along with a system clock showing 10:28 AM.

Some plans do not require that employees make contributions after they have attained a certain age or a certain number of years of service. In such cases mark the appropriate option, and fill in the corresponding blank with the appropriate information concerning age and/or years of service.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVDL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Mandatory Contributions (MAN)' folder is expanded, showing a sub-item 'MAN1'. Below the tree are checkboxes for 'Sample Run', 'Save', and 'Cancel'. The main window displays the 'Mandatory Contributions (MAN) [Plan: (new)]' dialog. It has tabs for 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'Max Age' tab is selected. The dialog contains the following text: 'MAN Number: 1' and 'Description:'. Below this is a section titled 'M2D. Is there a maximum age or service years after which participants are no longer required to make these contributions?'. Under this section is a box labeled 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. Below the box are several radio button options with corresponding input fields:
 

- ☐ Yes, Maximum Age: [ ]
- ☐ Yes, Maximum ASY: [ ]
- ☐ Yes, Maximum Age+ASY: [ ]
- ☐ Yes, When Over Maximum Age: [ ] OR Over Maximum ASY: [ ]
- ☐ Yes, When Over Maximum Age: [ ] AND Over Maximum ASY: [ ]
- ☐ No

 At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the 'Start' button and several open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '10:28 AM'.



The first question asks what type of benefit this is. Review the types of plans at the beginning of this document to help identify the type of plan.

The next question asks if the participant directs the investment of their own account. This is very common. If the answer is “Yes”, note the sorts of investments mentioned.

The last question here asks if the participant can borrow money from this account.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Mandatory Contributions (MAN) [Plan: (new)]'. It contains fields for 'MAN Number' (set to 1) and 'Description'. Below these are tabs for 'How Defined', 'SSWB', 'Dates', 'Start', 'Max Age', and 'Type'. The 'Type' tab is active, showing three questions: 'Y1. What kind of benefit is this?' with a dropdown menu, 'Y2. Is the participant allowed to direct the investment of their own funds?' with 'Yes' and 'No' radio buttons, and 'Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?' with 'Yes' and 'No' radio buttons. A section titled 'Available Investments' lists five options with checkboxes: 'Money Market Instruments/Funds', 'Bond Funds', 'Portfolios of Diversified Stock', 'Undiversified Portfolio of the Firm's Own Stock', and 'Other'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Close', and a set of navigation arrows. The taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 10:28 AM.

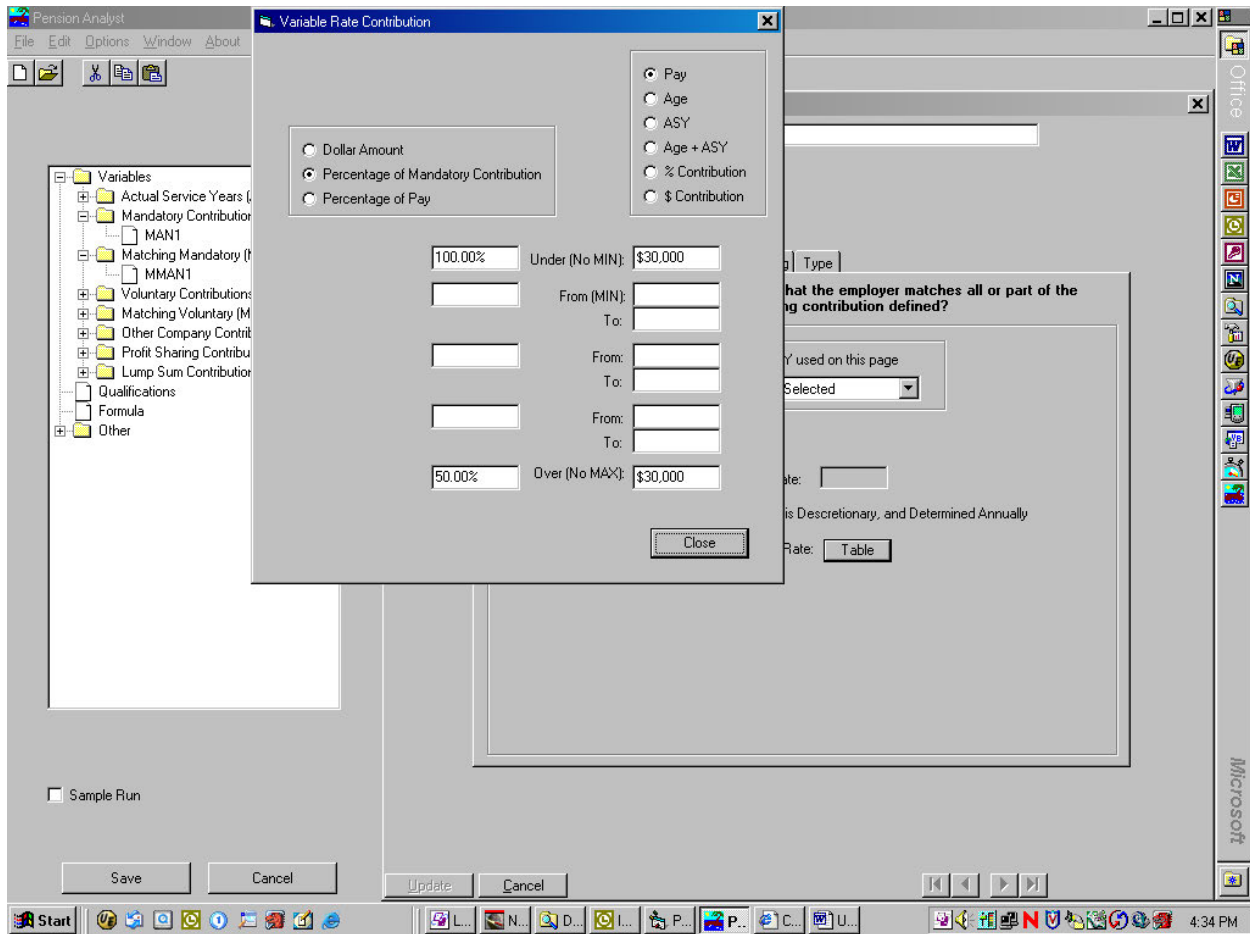
## Match of Mandatory Contribution (MMAN)

Firms may match all or part of the participant's mandatory contribution. Note that MMAN1 is the amount of MAN1 that will be matched. MMAN2 is the amount of MAN2 that will be matched, etc.

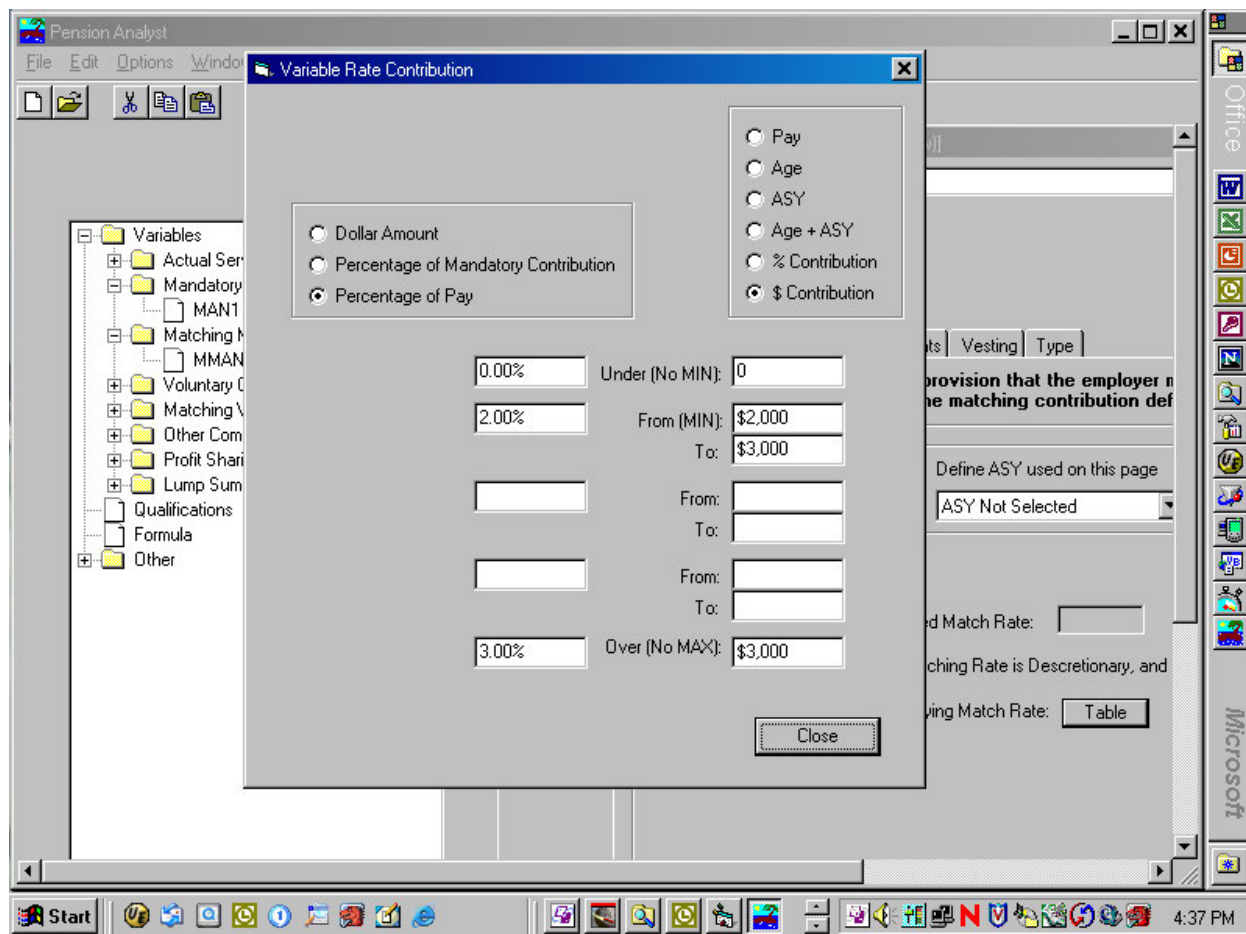
An employer can match an employee's mandatory contribution in many ways. One way is to contribute a specified proportion (such as 50 percent or 100 percent) of the employee's contribution; in such cases, the first option should be marked, and the correct percentage written into the corresponding blank. If matching is at the discretion of the employer, but not explicitly linked to profitability, mark the second option. If matching is explicitly linked to profitability, code the matching as a CTE. In other cases the fraction of the employee contribution that is matched by the employer may vary depending on the employee's age, years of service, salary level, or other circumstances.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'MMAN1' variable is selected under 'Matching Mandatory (MMAN)'. The main area shows the 'Match for Mandatory Contribution (MMAN) [Plan: new]' dialog box. It has tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type'. The 'How Defined' tab is active, showing the question: 'MMAN1. If the plan included a provision that the employer matches all or part of the mandatory contribution, how is the matching contribution defined?'. Below this is a dropdown menu 'Define ASY used on this page' set to 'ASY Not Selected'. Three radio button options are present: 'Fixed Match Rate: 50.00%' (selected), 'Matching Rate is Discretionary, and Determined Annually', and 'Varying Match Rate: Table'. The 'Table' button is disabled. At the bottom are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 4:32 PM.

Here's an example of a common variable rate matching contribution. In this case, the firm matches 100% of the Mandatory contribution for pay up to \$30,000, and 50% of the mandatory contribution for pay over \$30,000.



This example of a variable rate mandatory contribution is unusual, but will be helpful to understanding its use. This plan provides that the firm will contribute 2% of the employee's pay when the employee makes a dollar contribution of at least \$2,000. The firm will make a 3% of pay contribution if the employee contributes more than \$3,000.



In some plans there is a maximum amount that the employer will contribute in the way of a matching contribution, the contribution on the prior tab notwithstanding. Sometimes this maximum may be expressed as a dollar amount, in which case, the first option should be checked, and the dollar amount written into the corresponding blank. This dollar amount should be annualized. If the maximum is expressed as a percentage of the employee's wages or salaries, then the second option should be marked and the percentage written into the corresponding blank.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The 'Match for Mandatory Contribution (MMAN) [Plan: new]' dialog box is open, showing the 'Maximum' tab. It contains a form for defining the maximum contribution, with fields for MMAN Number (1) and Description. The main question is 'M2G. Is there a maximum amount the employer will contribute in matching funds? (e.g. employer contributes 50% of the first 6% -- check b and 3%)'. There are three radio button options: 'Yes Maximum Dollar Contribution', 'Yes, Maximum Percentage of Pay', and 'No (additional) Maximums on Matching Contributions'. The 'Sample Run' checkbox is checked at the bottom left. The taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 10:29 AM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
  - MAN1
- Matching Mandatory (MMAN)
  - MMAN1
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Match for Mandatory Contribution (MMAN) [Plan: new]**

MMAN Number: 1 Description:

How Defined Maximum Requirements Vesting Type

**M2G. Is there a maximum amount the employer will contribute in matching funds? (e.g. employer contributes 50% of the first 6% -- check b and 3%)**

☐ Yes Maximum Dollar Contribution:   
☐ Yes, Maximum Percentage of Pay:   
☐ No (additional) Maximums on Matching Contributions

Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 10:29 AM

Generally, there are no special requirements to receive these employer contributions. Sometimes, though, the contribution is only given to employees who were employed at a certain point or period in the past (i.e., the employer is phasing out the benefit). Note here any special requirement needed to receive this benefit.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area shows a dialog box titled 'Match for Mandatory Contribution (MMAN) [Plan: new]'. This dialog has tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type', with 'Requirements' currently selected. It contains a section labeled 'M2H. To receive any of the matching employer contributions, are there any other special requirements?' with several radio button options: 'No Other Special Requirements', 'Employer Approval Required', 'Past Service Required', 'If Plan Participant on:', 'If Plan Participant Before:', 'If Plan Participant After:', and 'If Plan Participant From: To:'. Each date option has a calendar icon and is currently set to '12 / 1999'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The main window also has 'Save' and 'Cancel' buttons and a 'Sample Run' checkbox. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock indicates '10:29 AM'.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
  - MAN1
- Matching Mandatory (MMAN)
  - MMAN1
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Match for Mandatory Contribution (MMAN) [Plan: new]**

MMAN Number: 1 Description:

How Defined Maximum Requirements Vesting Type

**M2H. To receive any of the matching employer contributions, are there any other special requirements?**

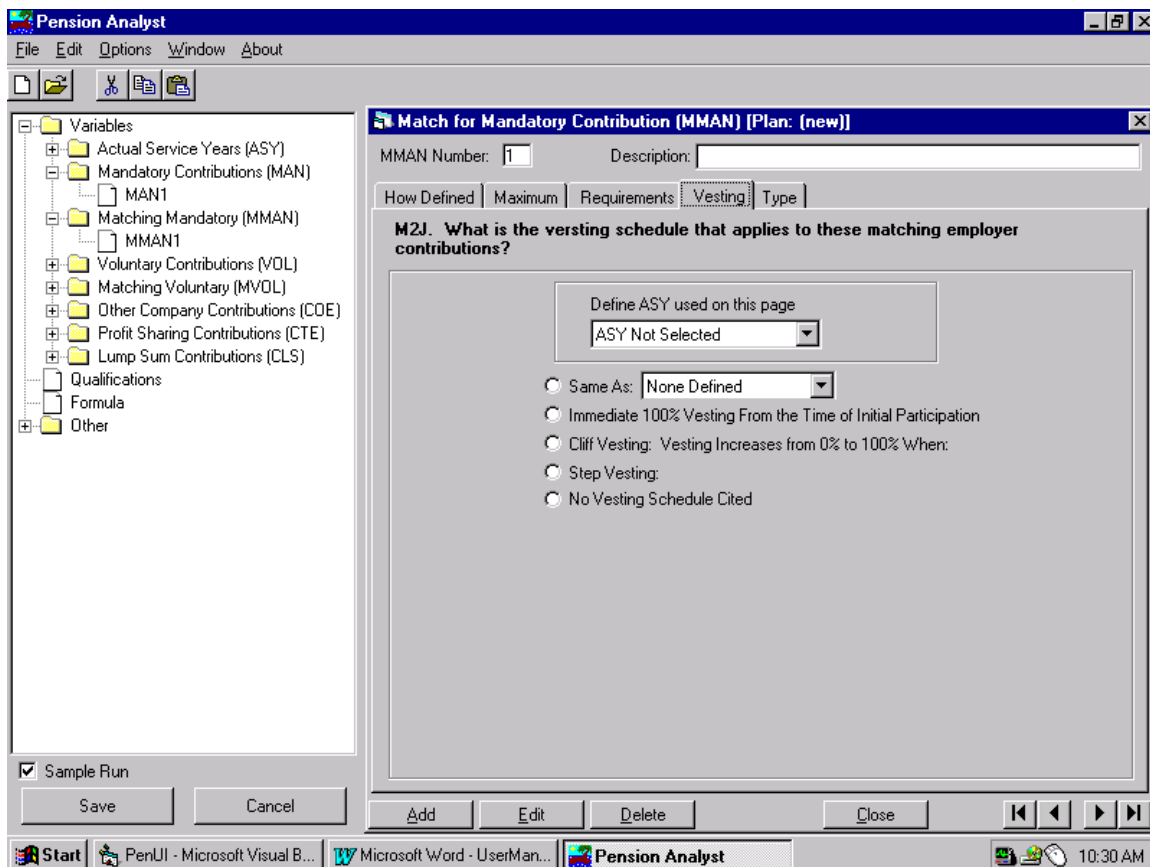
- ☐ No Other Special Requirements
- ☐ Employer Approval Required
- ☐ Past Service Required
- ☐ If Plan Participant on: 12 / 1999
- ☐ If Plan Participant Before: 12 / 1999
- ☐ If Plan Participant After: 12 / 1999
- ☐ If Plan Participant From: 12 / 1999 To: 12 / 1999

Add Edit Delete Close

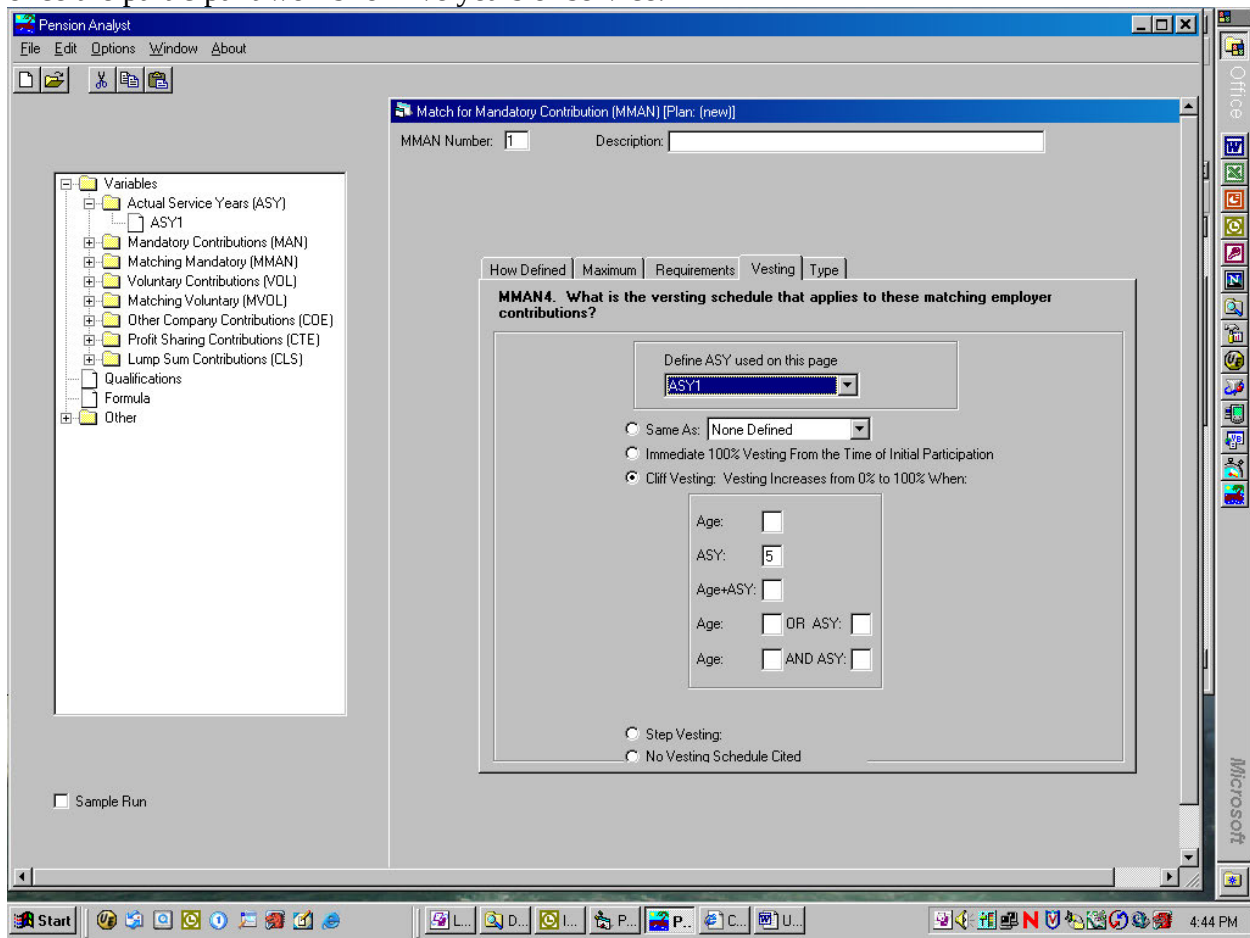
Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 10:29 AM

Typically, a participant must stay with a company for a certain period of time before earning a non-forfeitable right to a pension benefit. Those provisions will be entered here. Sometimes, participants are immediately vested from their first date of participation in the plan. In that case, mark the first option. The term “cliff vesting” refers to a milestone that must be passed. Before that milestone is passed, the participant is zero percent vested. After the milestone, the participant is 100% vested.

The term “step vesting” refers to a more gradual process of vesting in which, over a period of years, the participant’s vesting percent increases until the participant is 100% vested.



Cliff vesting generally occurs after reaching a specific milestone, generally a specific age or number of years of service. A very common cliff vesting provision is to provide 100% vesting once the participant works for five years of service.





The step vesting schedule looks more complex, but is really very simple. Suppose a plan provides that a participant will be 30% vested after 3 years of service, 60% vested after 5 years of service and 100% vested after 7 years of service. The ASY used would be selected in the “Define ASY used on this page” list, “.3” and “.6” would be entered in the “Begins at:” and “Reaches:” text boxes, and “3”, “5” and “7” would be entered in the three “ASY:” text boxes below.

**Pension Analyst**

File Edit Options Window About

**Match for Mandatory Contribution (MMAN) [Plan: (new)]**

MMAN Number: 1 Description:

How Defined Maximum Requirements **Vesting** Type

**MMAN4. What is the vesting schedule that applies to these matching employer contributions?**

Define ASY used on this page: ASY1

☐ Same As: None Defined  
☐ Immediate 100% Vesting From the Time of Initial Participation  
☐ Cliff Vesting: Vesting Increases from 0% to 100% When:  
☒ Step Vesting:

| Begins at: 30.00%                                       | Reaches: 60.00%                                         | Reaches 100% When:                                      |
|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| Age: <input type="text"/>                               | Age: <input type="text"/>                               | Age: <input type="text"/>                               |
| ASY: 3                                                  | ASY: 5                                                  | ASY: 7                                                  |
| Age+ASY: <input type="text"/>                           | Age+ASY: <input type="text"/>                           | Age+ASY: <input type="text"/>                           |
| Age: <input type="text"/> OR ASY: <input type="text"/>  | Age: <input type="text"/> OR ASY: <input type="text"/>  | Age: <input type="text"/> OR ASY: <input type="text"/>  |
| Age: <input type="text"/> AND ASY: <input type="text"/> | Age: <input type="text"/> AND ASY: <input type="text"/> | Age: <input type="text"/> AND ASY: <input type="text"/> |

☐ No Vesting Schedule Cited

☐ Sample Run

Microsoft

Start [Taskbar icons] 4:45 PM

There are three areas to address on this screen. First, select the type of plan represented by this MMAN. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this MMAN provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The 'MMAN' folder is expanded, showing 'MMAN1'. Below the tree view are checkboxes for 'Sample Run', 'Save', and 'Cancel'. The main area is a dialog box titled 'Match for Mandatory Contribution (MMAN) [Plan: new]'. It has tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type'. The 'Type' tab is active. It contains the following fields and options:

- MMAN Number: 1
- Description: (empty text box)
- Y1. What kind of benefit is this? (dropdown menu)
- Y2. Is the participant allowed to direct the investment of their own funds? (radio buttons for Yes and No)
- Available Investments (checkboxes):
  - Money Market Instruments/Funds
  - Bond Funds
  - Portfolios of Diversified Stock
  - Undiversified Portfolio of the Firm's Own Stock
  - Other
- Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit? (radio buttons for Yes and No)

At the bottom of the dialog box are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The Windows taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 10:31 AM.

## Voluntary Contribution in a DC plan (VOLDC)

If a government plan allows multiple voluntary contributions (e.g., a 457, a 403-b, and a 401-k), code only the one with the greatest maximum deferral (see next page). The rationale for this is that the maximums are not combined. A \$1 contribution to a 401-k reduces by \$1 the amount the participant can contribute to a 403-b.

A minimum is sometimes required for a voluntary contribution. Firms do not want to incur the record keeping costs for very small amounts. It is not at all uncommon for the minimum to be 1% of pay, for instance. The third option would be checked, and “1%” and “999999” would be written in the related text boxes. Remember, “999999” will always indicate that there is no maximum. Be sure to note if the contribution is specifically cited as being pre or post tax.

If the employee has the option of contributing either on a before or after tax basis, assume the following: the employee contributes on a pre-tax basis up to the maximum allowable pre-tax amounts. For example, if the employee is able to contribute 15% on a pre- or post tax basis, code two VOLs, the first pre-tax, and the second post-tax.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'VOL' folder is expanded, showing 'VOL1'. The main window is titled 'Voluntary Contributions(VOL) [Plan: [new]]'. It has a 'VOL Number' field set to '1' and a 'Description' field. Below these are tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'Minimum' tab is active, showing the question 'VOLDC1. What annual minimums apply to the voluntary contributions?'. There are three radio button options: 'Pre-Tax' (selected), 'Post-Tax', and 'Not Cited'. Below these are several options for minimums: 'No Minimum Amount', 'Fixed Dollar Amount', 'Fixed Percentage of Pay Up To' (selected), 'Fixed Percentage of Pay at or Below SSWB', 'Fixed Percentage of Pay Above SSWB', and 'Fixed Percentage of Pay Above SSWB Up To'. The 'Fixed Percentage of Pay Up To' option has a 'Pay' field set to '1.00%' and a 'Maximum Contribution' field set to '999999'. At the bottom are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 4:47 PM.

Normally, maximums are cited as annual maximums. Occasionally, though, a plan will let participants “make up” years that they contributed less than the maximum. For instance if the participant contributed only half the maximum last year, they could contribute the maximum this year plus half of last year’s maximum. Check “Annual” or “Career” as applicable. Assume contribution maximums are annual unless there is reason to believe otherwise. “Not Cited” should only be used in ambiguous cases.

Then mark the option that best describes the maximum. For instance, a plan may call for a 6% maximum contribution on the part of the employee. If no maximum dollar amount is mentioned, mark the second option, write “.06” in first text box and “999999” in the second text box to indicate that there is no maximum. Occasionally, the contribution is expressed as a sliding scale. In that case, press the “Table” button.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Voluntary Contributions (VOL)' folder is expanded, showing 'VOL1'. The main window displays the 'Voluntary Contributions (VOL) [Plan: new]' dialog box. At the top, there are fields for 'VOL Number: 1' and 'Description:'. Below this is a tabbed interface with tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'Maximum' tab is selected. The dialog box contains the following options and fields:

- ☒ **Minimum** (selected)
- ☐ **Maximum**
- ☐ **SSWB**
- ☐ **Withdraw**
- ☐ **Eligible**
- ☐ **Maximum Age**
- ☐ **Dates**
- ☐ **Type**

Below the tabs, the text reads: "VOLDC2. Aside from IRS maximums, what annual or career average maximums apply to the voluntary contributions?"

The options are:

- ☐ **Annual** (selected): Define ASY used on this page (dropdown menu showing "ASY Not Used")
- ☐ **Career**
- ☐ **Not Cited**
- ☐ **No Maximum Amount**
- ☐ **Fixed Dollar Amount:** (text box)
- ☒ **Fixed Percentage of up to Maximum**: Pay: 6.00%, Contribution: 999999
- ☐ **Fixed Percentage of Pay at or Below SSWB:** (text box)
- ☐ **Fixed Percentage of Pay Above SSWB:** (text box)
- ☐ **Fixed Percentage of Pay Above SSWB up to Maximum**: Contribution: (text box)
- ☐ **Varying Dollar or Percentage:** (text box) **Table** (button)

At the bottom of the dialog box are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock displaying 4:48 PM.

If the maximum is expressed as a varying amount depending on pay, age or years of service, press the “Table” button and fill out the form presented. Returning to the example in which the employee is allowed to contribute 15% of pay on a pre-tax or after-tax basis, the coding would be as follows. VOL1 would be the pre-tax contribution. Assuming this is a 401-k plan effective in 1998, we need to know the 401-k maximum deferral. These deferrals are listed in the tables below.

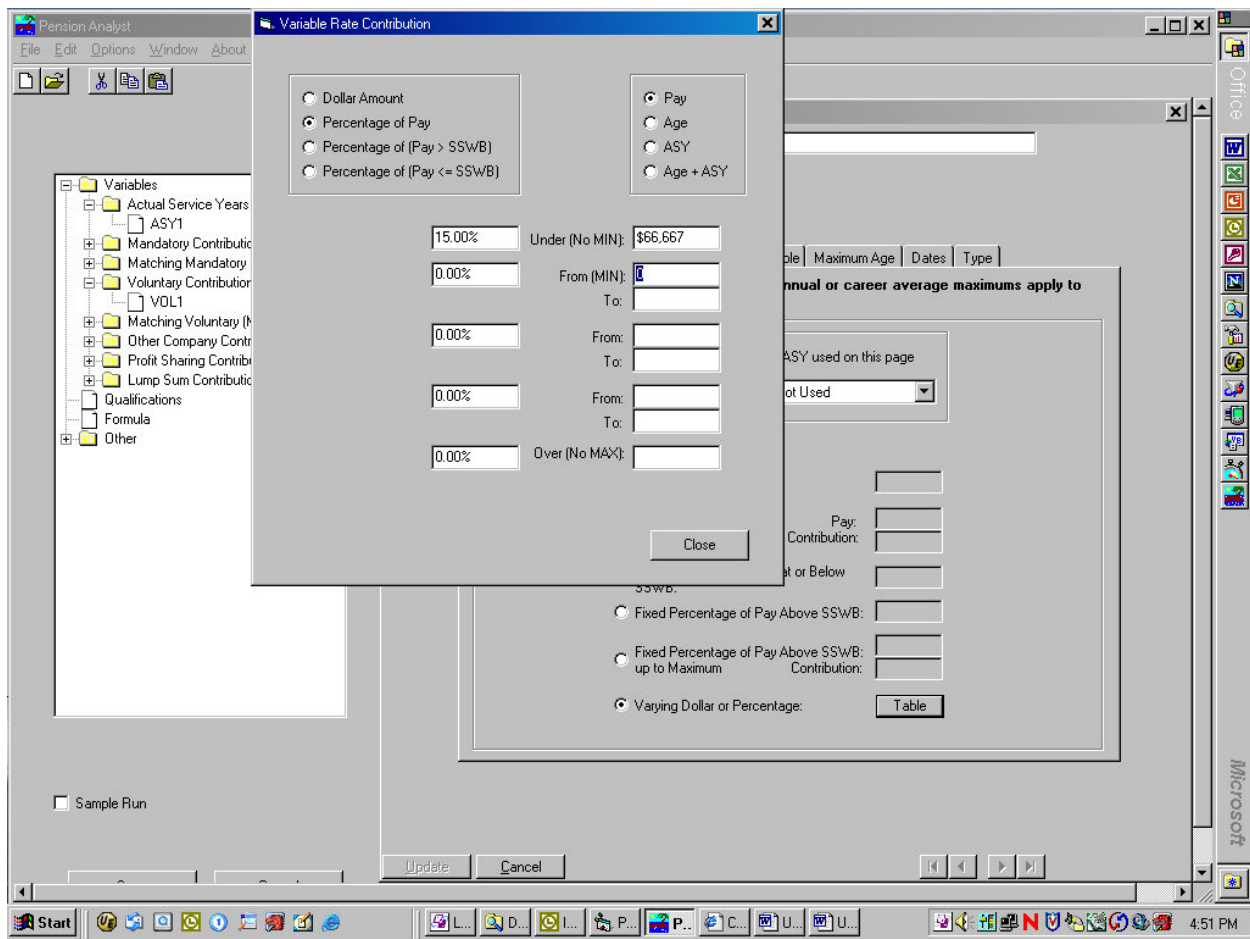
| 401k and 403b Maximums |          |
|------------------------|----------|
| 1996                   | \$9,500  |
| 1997                   | \$9,500  |
| 1998                   | \$10,000 |
| 1999                   | \$10,000 |

| 457 Maximum |         |
|-------------|---------|
| 1996        | \$7,500 |
| 1997        | \$7,500 |
| 1998        | \$8,000 |
| 1999        | \$8,000 |

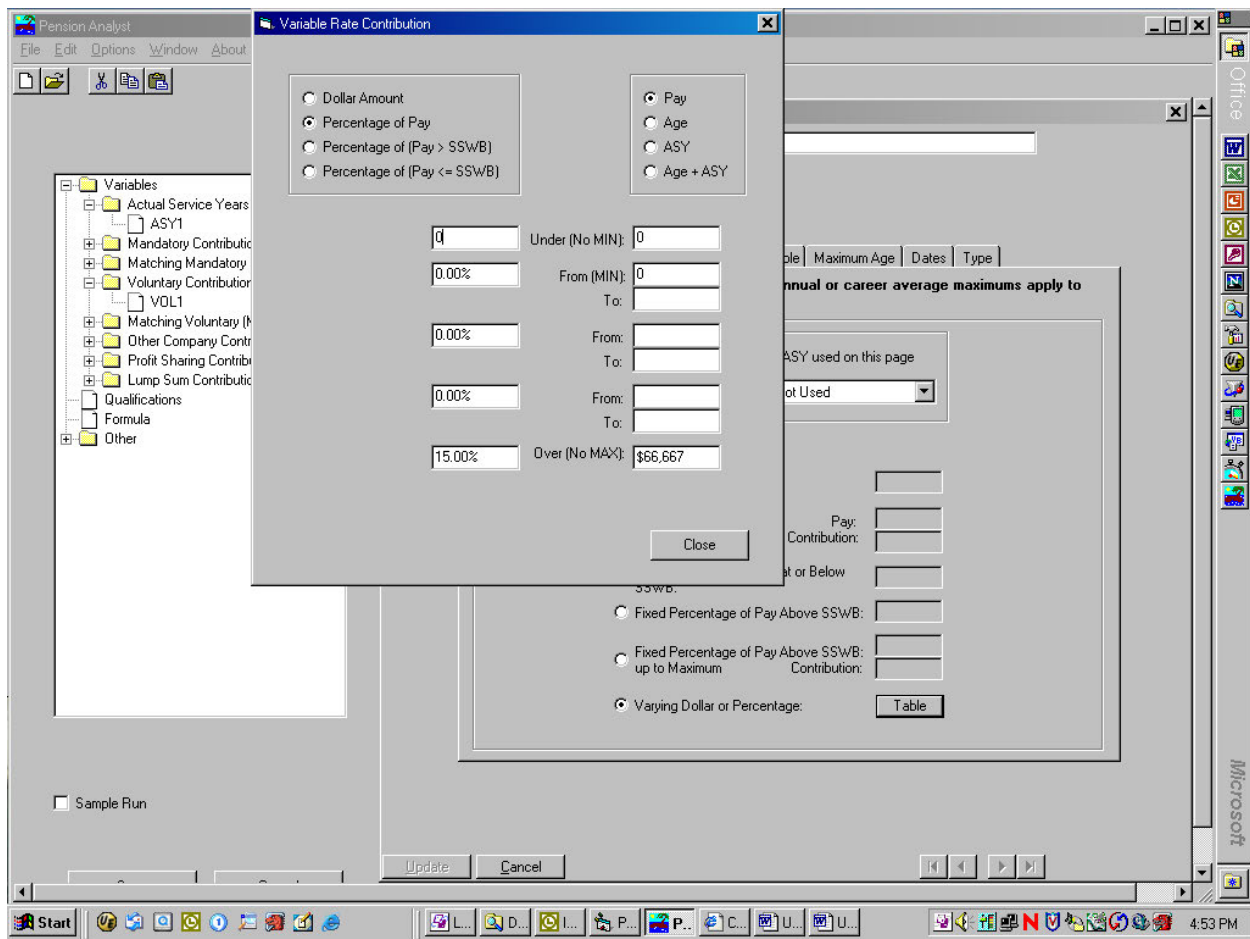
What amount of pay times 15% would achieve the 401-k 1998 maximum of \$10,000?

$\$10,000 / 15\% = \$66,667$

So the first pre-tax Vol's max would be coded:



The second post-tax VOL's maximum would be coded as:



If the options marked on either of the prior two tabs involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Voluntary Contributions (VOL)' folder is expanded, showing 'VOL1'. The main window is titled 'Voluntary Contributions(VOL) [Plan: new]'. It features a 'VOL Number' field set to '1' and a 'Description' field. Below these are tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'SSWB' tab is active, displaying the question 'M3B. Do any of the voluntary contributions depend on the Social Security Taxable Wage Base (SSWB)?'. Four radio button options are provided: 'Yes, Actual SSWB in Effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year: [text box]', and 'No'. At the bottom of the window are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock indicates 1:39 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
  - VOL1
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Voluntary Contributions(VOL) [Plan: new]**

VOL Number: 1 Description:

Minimum Maximum **SSWB** Withdraw Eligible Maximum Age Dates Type

**M3B. Do any of the voluntary contributions depend on the Social Security Taxable Wage Base (SSWB)?**

☐ Yes, Actual SSWB in Effect Each Year:

☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year: [text box]

☐ No

Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:39 PM



Some plans allow participants to withdraw their voluntary contributions while still employed. If the plan allows withdrawal only if the total amount of contributions is very small, code that as “No, Cannot Withdraw Contributions.”

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'VOL' folder is expanded, showing 'VOL1'. The main window is titled 'Voluntary Contributions(VOL) [Plan: (new)]'. It has fields for 'VOL Number: 1' and 'Description:'. Below these are tabs: 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'Withdraw' tab is selected, displaying the question: 'VOLDC4. Can vested participants at their own discretion withdraw any of their voluntary contributions while still employed?'. Below the question is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Used'. There are several radio button options: 'Yes', 'Yes, After' (with 'Age:' and 'ASY:' fields), 'Yes, After OR After' (with 'AGE:' and 'ASY:' fields), 'Yes, After AND After' (with 'Age:' and 'ASY:' fields), 'Yes, After' (with 'AGE+ASY:' field), and 'No, Cannot Withdraw Contributions'. At the bottom are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 4:55 PM.

This question asks when the employee can begin making these elective contributions. If the employee can begin making elective contributions immediately after first employment, mark the first option. Otherwise, mark the option that best describes when the employee can begin making elective income deferrals.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
  - VOL1
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

**Voluntary Contributions(VOL) [Plan: (new)]**

VOL Number: 1 Description:

Minimum Maximum SSWB Withdraw **Eligible** Maximum Age Dates Type

**M3D. When are participants eligible to make these voluntary contributions?**

☐ At Onset of Employment  
☐ After Employee reaches Age:   
☐ After Employee Completes First # Years:   
☐ After Employee Reaches Age:   
 OR After Completes First # YRS:   
☐ After Employee Reaches Age:   
 AND After Completes First # YRS:

☒ Sample Run  
 Save Cancel Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:40 PM

Rarely, a plan will specify a maximum age or ASY after which voluntary contributions cannot be made. If such a provision exists, note that provision here.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The 'VOL' folder is expanded, showing 'VOL1'. The main window is titled 'Voluntary Contributions(VOL) [Plan: new]'. It has a menu bar (File, Edit, Options, Window, About) and a toolbar. Below the toolbar are tabs: Minimum, Maximum, SSWB, Withdraw, Eligible, Maximum Age, Dates, and Type. The 'Maximum Age' tab is selected. The form contains the following fields and options:

- VOL Number: 1
- Description: (empty text box)
- Section header: **M3E. Is there a maximum age or service years after which participants can no longer make voluntary contributions?**
- Define ASY used on this page: (dropdown menu showing 'ASY Not Selected')
- Radio button options with input fields:
  - ☐ Yes, Maximum Age: [ ]
  - ☐ Yes, Maximum ASY: [ ]
  - ☐ Yes, Maximum Age+ASY: [ ]
  - ☐ Yes, When Over Maximum Age: [ ] OR Over Maximum ASY: [ ]
  - ☐ Yes, When Over Maximum Age: [ ] AND Over Maximum ASY: [ ]
  - ☐ No

At the bottom of the form are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The bottom of the application window shows a taskbar with the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:40 PM.

Generally the VOL definition covers all years. Sometimes a voluntary contribution was instituted only after a certain date, or it was discontinued after a certain date. Enter here any date limitations on the voluntary contribution.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)' (with a sub-entry 'VOL1'), 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Voluntary Contributions(VOL) [Plan: (new)]'. It includes a 'VOL Number' field set to '1' and a 'Description' field. Below these are tabs: 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'Dates' tab is active, showing a question: 'M3C. Is this voluntary contribution based only on specific calendar time periods, or on all years covered by this pension plan?'. Four radio button options are provided: 'Covers All Years: No Specific Date Cited', 'Before: 12/1999', 'After: 12/1999', and 'From: 12/1999 To: 12/1999'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', and 'Close' buttons. The main window has a menu bar (File, Edit, Options, Window, About) and a toolbar. The taskbar at the bottom shows 'Start', 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst' with a system clock showing 1:40 PM.

There are three areas to address on this screen. First, select the type of plan represented by this VOL. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this VOL provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL) with a sub-item VOL1, Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main area is titled 'Voluntary Contributions[VOL] [Plan: (new)]'. It contains fields for 'VOL Number' (set to 1) and 'Description'. Below these are tabs for 'Minimum', 'Maximum', 'SSWB', 'Withdraw', 'Eligible', 'Maximum Age', 'Dates', and 'Type'. The 'Eligible' tab is active, showing three questions: 'Y1. What kind of benefit is this?' with a dropdown menu; 'Y2. Is the participant allowed to direct the investment of their own funds?' with radio buttons for 'Yes' and 'No', and a list of 'Available Investments' (Money Market Instruments/Funds, Bond Funds, Portfolios of Diversified Stock, Undiversified Portfolio of the Firm's Own Stock, and Other); and 'Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?' with radio buttons for 'Yes' and 'No'. At the bottom are buttons for 'Add', 'Edit', 'Delete', and 'Close'. The taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:40 PM.

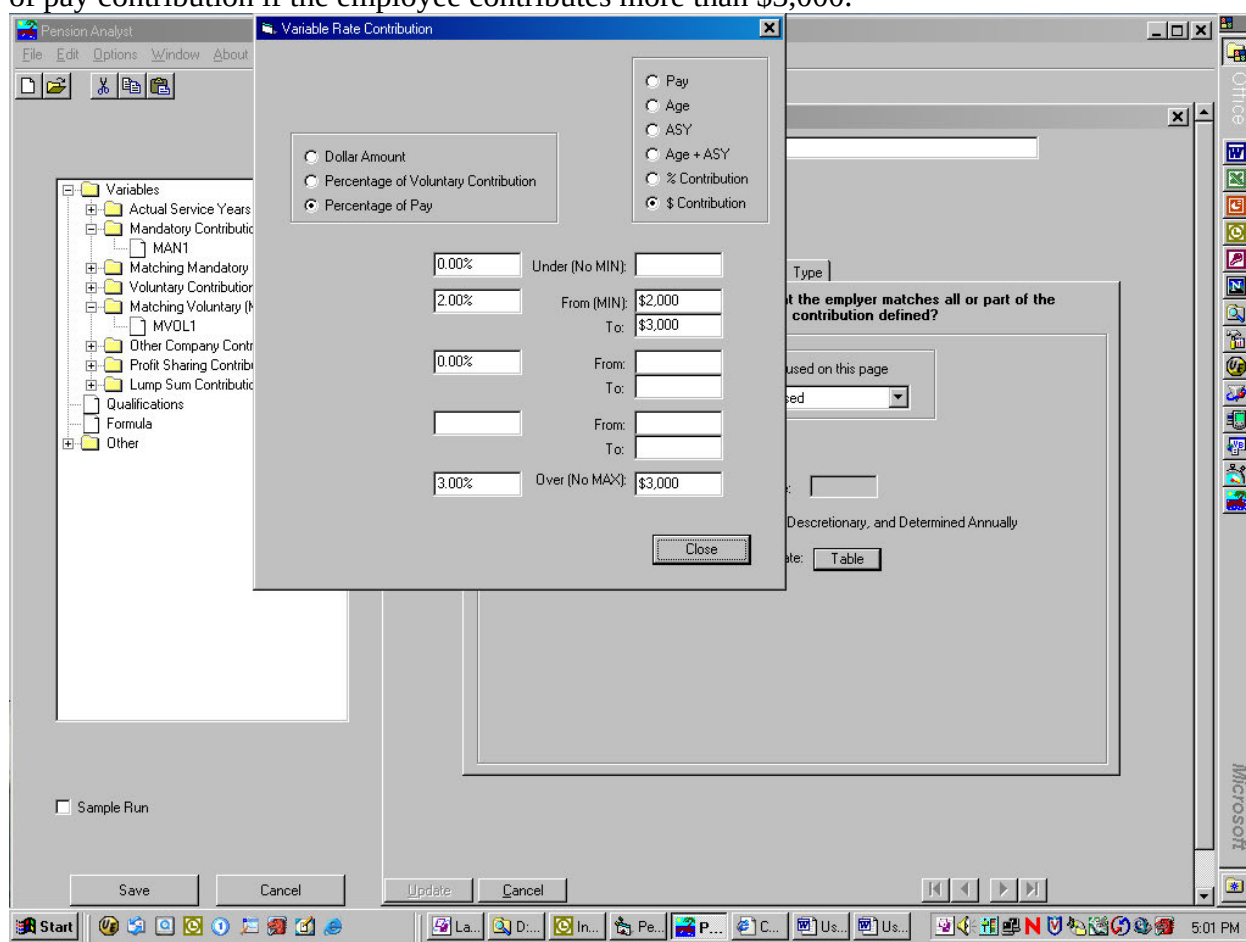
### Match of Voluntary Contributions (MVOL)

Firms may match all or part of the participant's voluntary contribution. Note that MVOL1 is the amount of VOL1 that will be matched. MVOL2 is the amount of VOL2 that will be matched, etc.

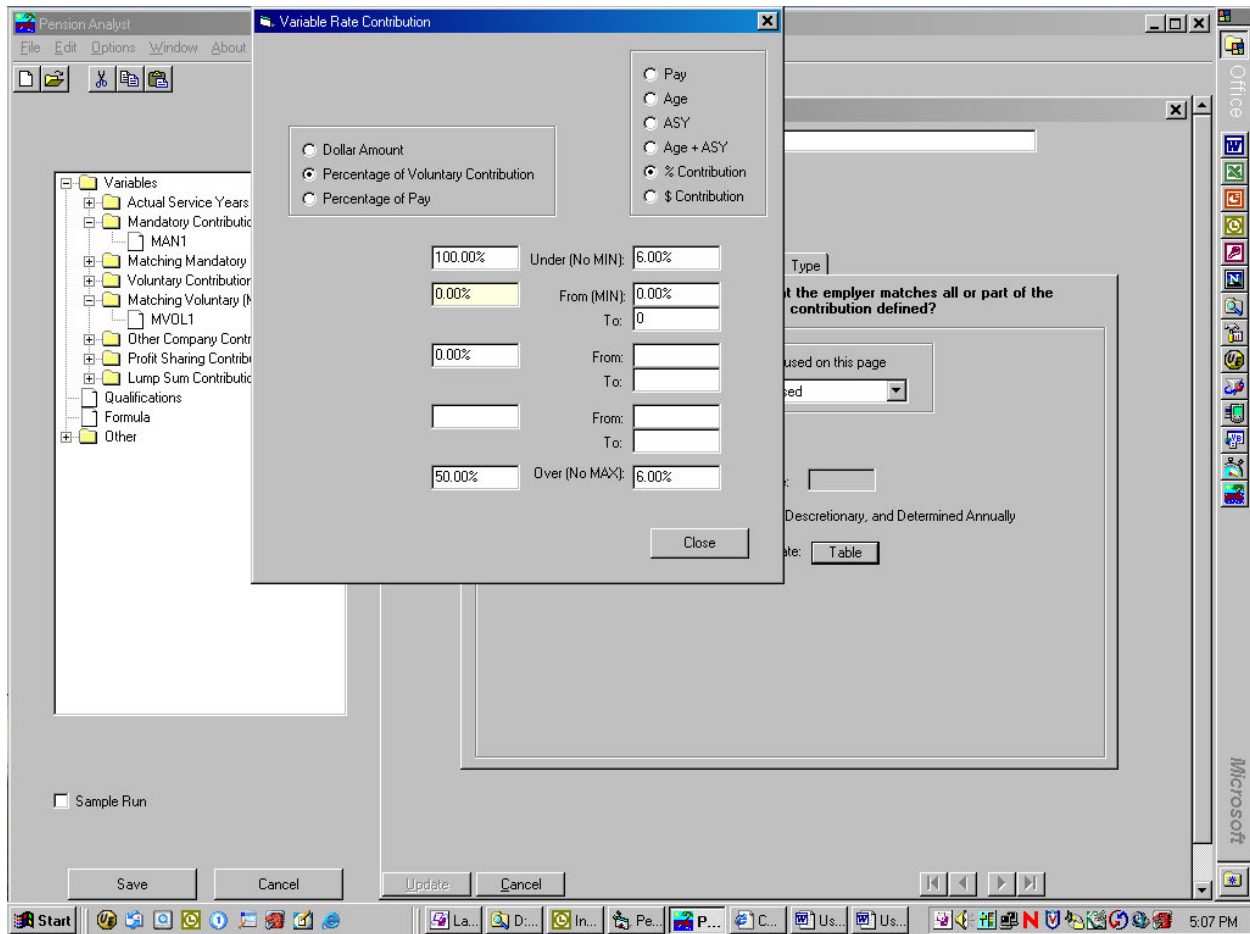
An employer can match an employee's mandatory contribution in many ways. One way is to contribute a specified proportion (such as 50 percent or 100 percent) of the employee's contribution; in such cases, the first option should be marked, and the correct percentage written into the corresponding blank. If matching is at the discretion of the employer, but not explicitly linked to profitability, mark the second option. If matching is explicitly linked to profitability, code the matching as a CTE. In other cases the fraction of the employee contribution that is matched by the employer may vary depending on the employee's age, years of service, salary level, or other circumstances.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Matching Voluntary (MVOL)' folder is expanded, showing 'MVOL1'. The main area shows the 'Match for Voluntary Contribution (MVOL) [Plan: (new)]' dialog box. It has fields for 'MVOL Number' (set to 1) and 'Description'. Below these are tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type'. The 'How Defined' tab is active, displaying the text: 'MVOL1. If the plan included a provision that the employer matches all or part of the mandatory contribution, how is the matching contribution defined?'. A dropdown menu 'Define ASY used on this page' is set to 'ASY Not Used'. Three radio button options are present: 'Fixed Match Rate' (selected) with a value of '50.00%', 'Matching Rate is Discretionary, and Determined Annually', and 'Varying Match Rate' with a 'Table' button. At the bottom of the dialog are 'Update' and 'Cancel' buttons. The main window has 'Save' and 'Cancel' buttons at the bottom left. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 4:53 PM.

If the matching contribution is on a sliding scale press the “Table” button and fill out the form presented. For example, this plan provides that the firm will contribute 2% of the employee’s pay when the employee makes a dollar contribution of at least \$2,000. The firm will make a 3% of pay contribution if the employee contributes more than \$3,000.



Here's a more common example of a common variable rate matching contribution. In this case, the firm matches 100% of the first 6% voluntary contribution, and 50% of the next 6%. That is, if the participant contributes 6% the firm contributes 6%. If the participant contributes 12%, the firm contributes 9% ( $100\% \times 6\% + 50\% \times 6\%$ )

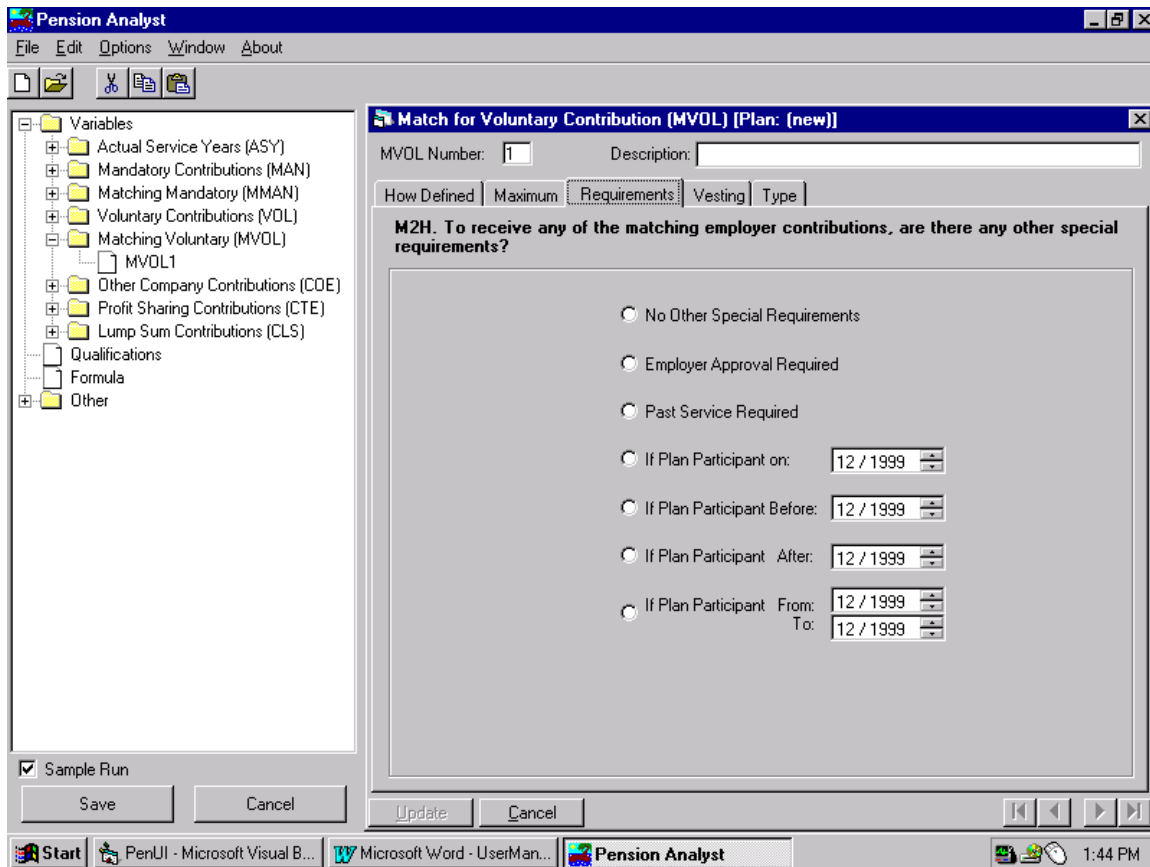




In some plans there is a maximum amount that the employer will contribute in the way of a matching contribution, the contribution on the prior tab notwithstanding. Sometimes this maximum may be expressed as a dollar amount, in which case, the first option should be checked, and the dollar amount written into the corresponding blank. This dollar amount should be annualized. If the maximum is expressed as a percentage of the employee's wages or salaries, then the second option should be marked and the percentage written into the corresponding blank.

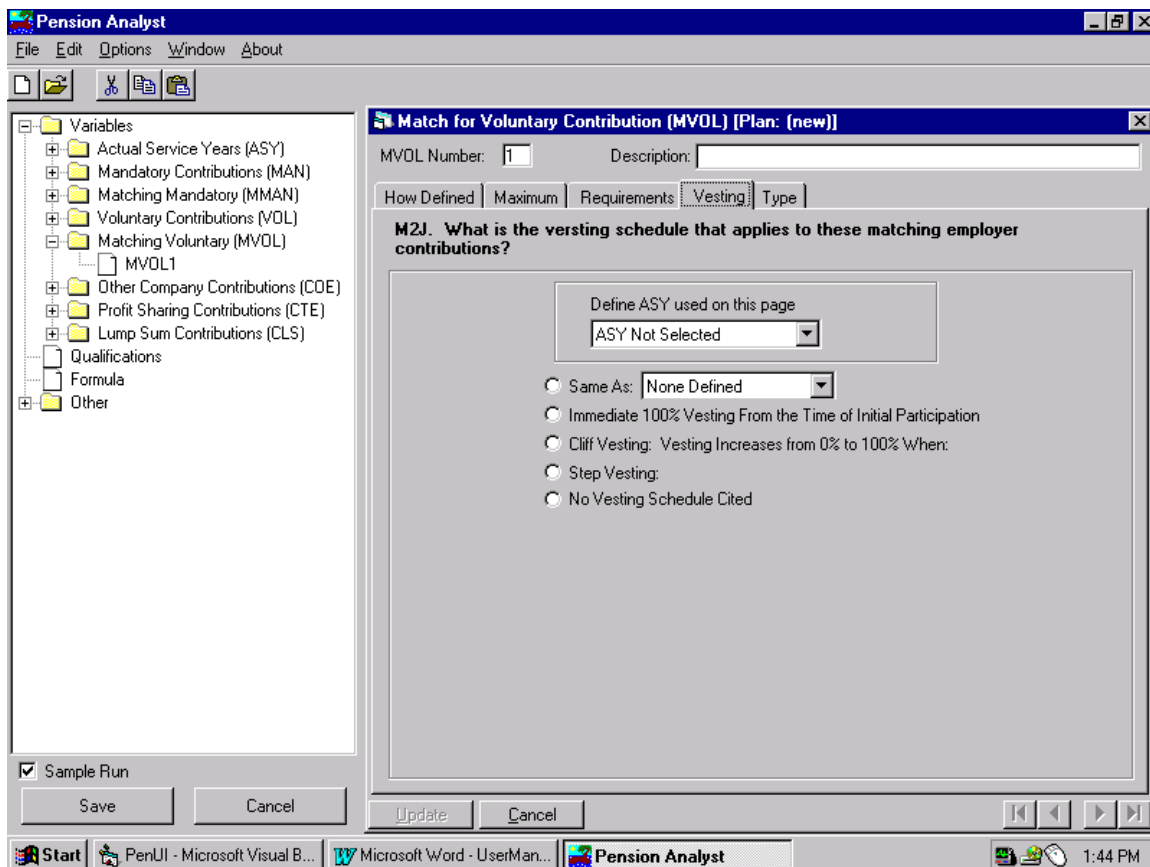
The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Match for Voluntary Contribution (MVOL) [Plan: new]' dialog box is open, displaying the 'Maximum' tab. It contains fields for 'MVOL Number' (set to 1) and 'Description'. Below these are tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type'. The 'Maximum' tab shows a question: 'M2G. Is there a maximum amount the employer will contribute in matching funds? (e.g. employer contributes 50% of the first 6% -- check b and 3%)'. Three radio button options are provided: 'Yes Maximum Dollar Contribution:' with an adjacent text box, 'Yes, Maximum Percentage of Pay:' with an adjacent text box, and 'No (additional) Maximums on Matching Contributions'. At the bottom of the dialog are 'Update' and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock indicates 1:44 PM.

Generally, there are no special requirements to receive these employer contributions. Sometimes, though, the contribution is only given to employees who were employed at a certain point or period in the past (i.e., the employer is phasing out the benefit). Note here any special requirement needed to receive this benefit.



Typically, a participant must stay with a company for a certain period of time before earning a non-forfeitable right to a pension benefit. Those provisions will be entered here. Sometimes, participants are immediately vested from their first date of participation in the plan. In that case, mark the first option. The term “cliff vesting” refers to a milestone that must be passed. Before that milestone is passed, the participant is zero percent vested. After the milestone, the participant is 100% vested.

The term “step vesting” refers to a more gradual process of vesting in which, over a period of years, the participant’s vesting percent increases until the participant is 100% vested.



Cliff vesting generally occurs after reaching a specific milestone, generally a specific age or number of years of service. A very common cliff vesting provision is to provide 100% vesting once the participant works for five years of service.

The screenshot displays the 'Pension Analyst' software window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)' (with a sub-item 'MVOL1'), 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', and 'Lump Sum Contributions (CLS)', along with 'Qualifications', 'Formula', and 'Other'. The main area shows the 'Match for Voluntary Contribution (MVOL) [Plan: [new]]' dialog box. It has tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type', with 'Vesting' currently selected. The dialog contains the following fields and options:

- MVOL Number: 1
- Description: (empty text box)
- Define ASY used on this page: ASY Not Selected (dropdown)
- Radio buttons for vesting schedule:
  - ☐ Same As: None Defined (dropdown)
  - ☐ Immediate 100% Vesting From the Time of Initial Participation
  - ☒ Cliff Vesting: Vesting Increases from 0% to 100% When:
    - Age: ☐
    - ASY: ☐
    - Age+ASY: ☐
    - Age: ☐ OR ASY: ☐
    - Age: ☐ AND ASY: ☐
  - ☐ Step Vesting:
  - ☐ No Vesting Schedule Cited

Buttons at the bottom include 'Sample Run' (checked), 'Save', 'Cancel', 'Update', and 'Cancel'. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:45 PM.

The step vesting schedule looks more complex, but is really very simple. Suppose a plan provides that a participant will be 30% vested after 3 years of service, 60% vested after 5 years of service and 100% vested after 7 years of service. The ASY used would be selected in the “Define ASY used on this page” list, “.3” and “.6” would be entered in the “Begins at:” and “Reaches:” text boxes, and “3”, “5” and “7” would be entered in the three “ASY:” text boxes below.

Pension Analyst

File Edit Options Window About

Match for Voluntary Contribution (MVDL) [Plan: (new)]

MVDL Number: 1 Description:

How Defined Maximum Requirements Vesting Type

**MVDL4. What is the vesting schedule that applies to these matching employer contributions?**

Define ASY used on this page  
ASY1

☐ Same As: None Defined  
☐ Immediate 100% Vesting From the Time of Initial Participation  
☐ Cliff Vesting: Vesting Increases from 0% to 100% When:  
☒ Step Vesting:

| Begins at: 30.00%                                               | When: | Reaches: 60.00%                                                 | When: | Reaches 100% When:                                              |
|-----------------------------------------------------------------|-------|-----------------------------------------------------------------|-------|-----------------------------------------------------------------|
| Age: <input type="checkbox"/>                                   |       | Age: <input type="checkbox"/>                                   |       | Age: <input type="checkbox"/>                                   |
| ASY: 3                                                          |       | ASY: 5                                                          |       | ASY: 7                                                          |
| Age+ASY: <input type="checkbox"/>                               |       | Age+ASY: <input type="checkbox"/>                               |       | Age+ASY: <input type="checkbox"/>                               |
| Age: <input type="checkbox"/> OR ASY: <input type="checkbox"/>  |       | Age: <input type="checkbox"/> OR ASY: <input type="checkbox"/>  |       | Age: <input type="checkbox"/> OR ASY: <input type="checkbox"/>  |
| Age: <input type="checkbox"/> AND ASY: <input type="checkbox"/> |       | Age: <input type="checkbox"/> AND ASY: <input type="checkbox"/> |       | Age: <input type="checkbox"/> AND ASY: <input type="checkbox"/> |

☐ No Vesting Schedule Cited

Sample Run

Save Cancel Update Cancel

Start La... D:... In... Pe... P... C... Us... Us... 5:11 PM

There are three areas to address on this screen. First, select the type of plan represented by this MVOL. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this MVOL provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a 'Variables' tree with folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'MVOL' folder is expanded, showing 'MVOL1'. Below the tree are 'Sample Run' (checked), 'Save', and 'Cancel' buttons.

The main dialog box is titled 'Match for Voluntary Contribution (MVOL) [Plan: (new)]'. It has tabs for 'How Defined', 'Maximum', 'Requirements', 'Vesting', and 'Type'. The 'Type' tab is active. At the top, 'MVOL Number' is set to '1' and 'Description' is empty. Below the tabs, there are three questions:

- Y1. What kind of benefit is this?** with a dropdown menu.
- Y2. Is the participant allowed to direct the investment of their own funds?** with radio buttons for 'Yes' and 'No'. To the right, under 'Available Investments', are checkboxes for:
  - Money Market Instruments/Funds
  - Bond Funds
  - Portfolios of Diversified Stock
  - Undiversified Portfolio of the Firm's Own Stock
  - Other
- Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?** with radio buttons for 'Yes' and 'No'.

At the bottom of the dialog are 'Update' and 'Cancel' buttons, and a set of navigation arrows. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '1:45 PM'.

## Other Employer Contributions (COE)

If the employer makes regular periodic contributions not related to the profitability of the firm or the contributions of the employees, code those contributions here. Note whether the plan describes this as Pre-tax (i.e., the contribution is only taxable to the employee when they withdraw it at retirement).

The most common contribution is a percentage of pay. For instance, if the plan provides a 6% annual contribution, with no maximum dollar amount, mark the second option, write “.06” in the first text box, and “999999” in the second textbox. Remember, “999999” in this application always means there is no maximum.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'COE' folder is expanded, showing 'COE1'. Below the tree is a 'Sample Run' checkbox and 'Save' and 'Cancel' buttons.

The main window displays the 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]' dialog box. It has a 'COE Number' field set to '1' and a 'Description' field. Below these are tabs for 'How Defined', 'SSWB', 'Dates', 'Eligible', 'Requirements', and 'Begin'. The 'How Defined' tab is active, showing the question: 'COE1. On an annual basis, how are the Other Employer Contributions (COE) calculated?'. There are three radio button options: 'Pre-Tax' (selected), 'Post-Tax', and 'Not Cited'. To the right of these is a dropdown menu labeled 'Define ASY used on this page' with 'ASY Not Used' selected. Below the radio buttons are several input fields for different contribution types: 'Fixed Dollar Amount', 'Fixed Percentage of up to Maximum' (with 'Pay' set to '6.00%' and 'Contribution' set to '\$999,999'), 'Fixed Percentage of Pay at or Below SSWB', 'Fixed Percentage of Pay Above SSWB', 'Fixed Percentage of Pay Above SSWB up to Maximum', and 'Varying Dollar or Percentage' (with a 'Table' button). At the bottom of the dialog are 'Update' and 'Cancel' buttons, and a 'COE Part 2' button. The Windows taskbar at the bottom shows the Start button, several application icons, and the system clock at 5:13 PM.

If the amount of the contribution varies with pay, age or years of service, click the “Table” button and fill out the form displayed. For example, the employer may contribute 5% of the first \$30,000 of income, and 6% of income above \$30,000.

The screenshot shows the 'Pension Analyst' software interface. A 'Variable Rate Contribution' dialog box is open, allowing users to define contribution rates based on pay, age, or years of service. The dialog box has two main sections for defining contribution rates: 'Under (No MIN)' and 'Over (No MAX)'. Each section has input fields for a percentage and a dollar amount. The 'Under (No MIN)' section is currently set to 5.00% and \$30,000. The 'Over (No MAX)' section is currently set to 6.00% and \$30,000. There are also radio buttons for selecting the basis of the contribution: 'Pay', 'Age', 'ASY', or 'Age + ASY'. The 'Pay' option is selected. Below these sections, there are radio buttons for 'Fixed Percentage of Pay Above SSWB' and 'Fixed Percentage of Pay Above SSWB up to Maximum', and a 'Varying Dollar or Percentage' option which is selected. A 'Table' button is next to the 'Varying Dollar or Percentage' option. The background shows the main 'Pension Analyst' window with a tree view of variables on the left and a 'Sample Run' checkbox. The Windows taskbar at the bottom shows the Start button and various application icons, including Internet Explorer, Word, and Excel. The system clock in the bottom right corner shows 5:15 PM.

**Variable Rate Contribution**

☐ Dollar Amount  
☒ Percentage of Pay  
☐ Percentage of (Pay > SSWB)  
☐ Percentage of (Pay <= SSWB)

☒ Pay  
☐ Age  
☐ ASY  
☐ Age + ASY

5.00% Under (No MIN): \$30,000  
 From (MIN):  
 To:

6.00% Over (No MAX): \$30,000  
 From:  
 To:

☐ Fixed Percentage of Pay Above SSWB:  
☐ Fixed Percentage of Pay Above SSWB up to Maximum  
☒ Varying Dollar or Percentage: **Table**

Close



If the option marked on the prior tab involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)' (with a sub-item 'COE1'), 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]'. It contains a 'COE Number' field, a 'Description' field, and a tabbed interface with 'How Defined', 'SSWB', 'Dates', 'Eligible', 'Requirements', and 'Begin' tabs. The 'SSWB' tab is active, displaying the question 'R3A. Does the other employer contribution depend on the Social Security Taxable Wage Base (SSWB)?' with four radio button options: 'Yes, Actual SSWB in Effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year: [text box]', and 'No'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', 'COE Part 2', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:47 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
  - COE1
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]**

COE Number: [ ] Description: [ ]

How Defined SSWB Dates Eligible Requirements Begin

**R3A. Does the other employer contribution depend on the Social Security Taxable Wage Base (SSWB)?**

☐ Yes, Actual SSWB in Effect Each Year

☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year: [ ]

☐ No

Add Edit Delete COE Part 2 Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:47 PM

Generally the COE definition covers all years. Sometimes an other contribution was instituted only after a certain date, or it was discontinued after a certain date. Enter here any date limitations on the other contribution.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)' (with a sub-item 'COE1'), 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]'. It has tabs for 'How Defined', 'SSWB', 'Dates', 'Eligible', 'Requirements', and 'Begin'. The 'Dates' tab is active, showing a question: 'R3B. IS the other employer contribution based only on specific calendar time periods, or on all years covered by this pension plan?'. Below this are four radio button options: 'Covers all years: no specific dates cited.' (selected), 'Before: 12/1999', 'After: 12/1999', and 'From: 12/1999 To: 12/1999'. At the bottom are buttons for 'Add', 'Edit', 'Delete', 'COE Part 2', and 'Close'. The Windows taskbar at the bottom shows 'Start', 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst' with a system clock of 1:47 PM.

Plans often do not intend to provide such a benefit to part-time or seasonal workers, so they require some minimum threshold of work before they will count a year. For instance a plan may require an employee to work 1,600 hours before they will count the year as a year of service for pension purposes. If working less than 1,600 hours results in no service counted, the second option would be checked and “1600” would be entered in the first text box.

If a plan states that the employee must be employed in each month but specifies no minimum hours, code that as 12 months per year and one hour per month.

The screenshot displays the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Other Company Contributions (COE)' folder is expanded, showing 'COE1'. The main area is titled 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]'. It contains a 'COE Number' field with '1' and a 'Description' field. Below these are tabs: 'How Defined', 'SSWB', 'Dates', 'Eligible' (selected), 'Requirements', and 'Begin'. The 'Eligible' tab contains the question: 'R3C. Are participants eligible for this contributions for each year they meet minimum employment requirements, or does the amount of the contribution depend on the actual'. There are four radio button options: 1. 'Full Contribution for Each Year Employed, No Minimum Work Requirements'. 2. 'Contribution Either Full or Zero; Full Contribution for Each Year Worked a Minimum of:' followed by a text box and 'Hours Per Year'. 3. 'Contribution a Prorated Fraction From Zero to One; Full Contribution in Each Year Worked a Minimum of:' followed by a text box and 'Weeks Per Year, AND' and another text box and 'Hours Per Week'. 4. 'Contribution a Prorated Fraction From Zero to More than a Full Contribution; Full Contribution in Each Year Worked a Minimum of:' followed by a text box and 'Months Per Year, AND' and another text box and 'Hours Per Month'. At the bottom are buttons: 'Add', 'Edit', 'Delete', 'COE Part 2', and 'Close'. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '1:47 PM'.

Generally, there are no special requirements to receive these employer contributions. Sometimes, though, the contribution is only given to employees who were employed at a certain point or period in the past (i.e., the employer is phasing out the benefit). Note here any special requirement needed to receive this benefit.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'COE' folder is expanded, showing 'COE1'. Below the tree view are buttons for 'Sample Run', 'Save', and 'Cancel'. The main area displays the 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]' dialog box. It has tabs for 'How Defined', 'SSWB', 'Dates', 'Eligible', 'Requirements', and 'Begin'. The 'Requirements' tab is active, showing a question: 'R3D. To receive this employer contribution, are there any other special requirements?'. Below this are several radio button options: 'No Other Special Requirements', 'Employer Approval Required', 'Past Service Required', 'If Plan Participant on:', 'If Plan Participant Before:', 'If Plan Participant After:', and 'If Plan Participant From: To:'. Each date field is set to '12 / 1999'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', 'COE Part 2', and 'Close'. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '1:47 PM'.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
  - COE1
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]**

COE Number: 1 Description:

How Defined SSWB Dates Eligible Requirements Begin

**R3D. To receive this employer contribution, are there any other special requirements?**

☐ No Other Special Requirements

☐ Employer Approval Required

☐ Past Service Required

☐ If Plan Participant on: 12 / 1999

☐ If Plan Participant Before: 12 / 1999

☐ If Plan Participant After: 12 / 1999

☐ If Plan Participant From: 12 / 1999 To: 12 / 1999

Add Edit Delete COE Part 2 Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:47 PM

Many employers begin making such contributions at the onset of employment, but many other employers begin making contributions only after an employee has reached a certain age or tenure. Note here any limitations on when these contributions begin.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)' (with a sub-item 'COE1'), 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area displays the 'Other Employer Contributions (COE) Part 1 of 2 [Plan: (new)]' dialog. It has tabs for 'How Defined', 'SSWB', 'Dates', 'Eligible', 'Requirements', and 'Begin'. The 'Begin' tab is active, showing the question 'R2J. When does the employer begin to make these contributions on behalf of the participant?'. Below this are five radio button options with associated input fields for age and years:
 

- ☐ At Onset of Employment
- ☐ After Employee Reaches Age: [ ]
- ☐ After Employee Completes First # Years: [ ]
- ☐ After Employee Reaches Age: [ ] OR After Completes First # Years: [ ]
- ☐ After Employee Reaches Age: [ ] AND After Completes First # Years: [ ]

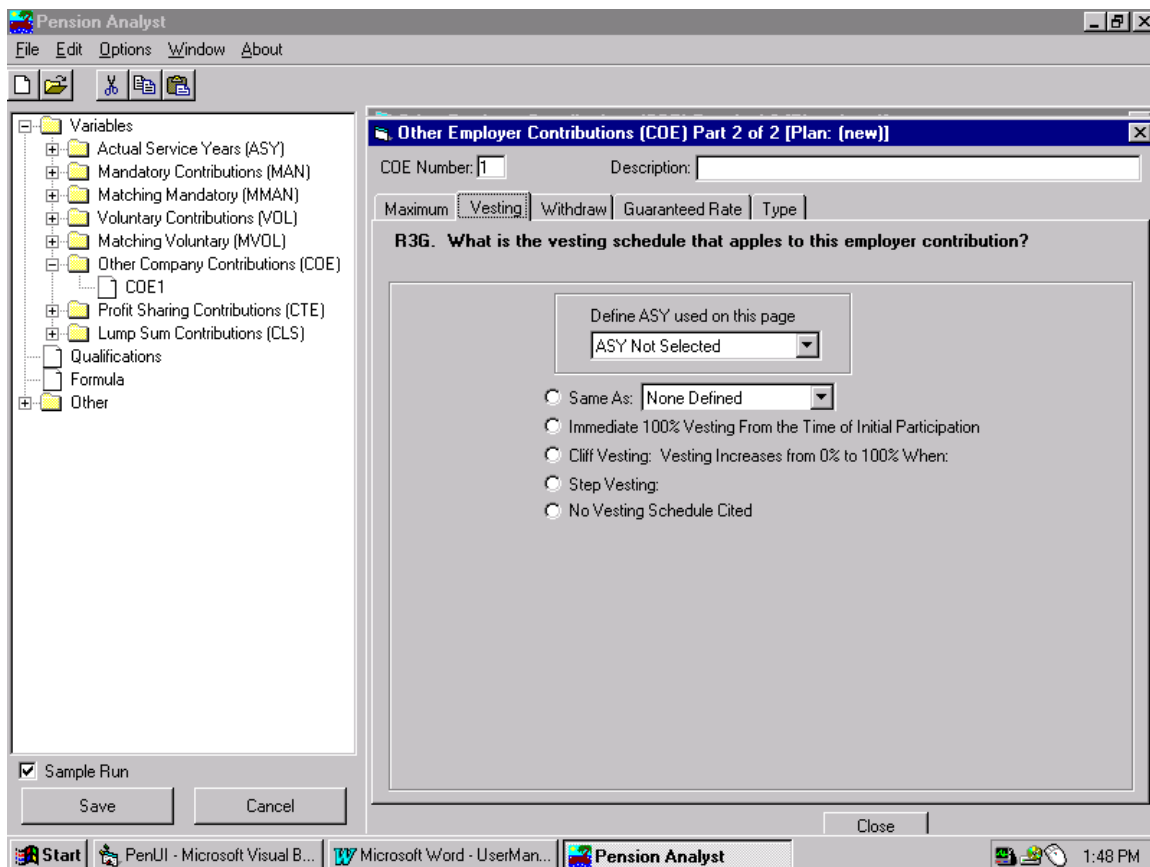
 At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', 'COE Part 2', and 'Close'. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:48 PM.

A plan sometimes specifies a maximum age or number of service years beyond which contributions will no longer be made on behalf of the participant. Although this sort of provision is rare, code it here when it is mentioned. Be sure to specify which ASY are counted (“Define ASY used on this page”) if ASY is used in the maximum.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main window displays the 'Other Employer Contributions (COE) Part 2 of 2 [Plan: (new)]' dialog box. This dialog has tabs for 'Maximum', 'Vesting', 'Withdraw', 'Guaranteed Rate', and 'Type'. The 'Maximum' tab is active, showing a question: 'R3F. Is there a maximum age or service years after which employer contributions are no longer made on behalf of the participant?'. Below this question is a section 'Define ASY used on this page' with a dropdown menu currently set to 'ASY Not Selected'. There are six radio button options for the maximum: 'Yes, Maximum Age', 'Yes, Maximum ASY', 'Yes, Maximum Age + ASY', 'Yes, When Over Maximum Age: OR Over Maximum ASY', 'Yes, When Over Maximum Age: AND Over Maximum ASY', and 'No'. Each 'Yes' option has associated input fields for the maximum value. At the bottom of the dialog is a 'Close' button. The taskbar at the bottom shows the Start button and several open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:48 PM.

Typically, a participant must stay with a company for a certain period of time before earning a non-forfeitable right to a pension benefit. Those provisions will be entered here. Sometimes, participants are immediately vested from their first date of participation in the plan. In that case, mark the first option. The term “cliff vesting” refers to a milestone that must be passed. Before that milestone is passed, the participant is zero percent vested. After the milestone, the participant is 100% vested.

The term “step vesting” refers to a more gradual process of vesting in which, over a period of years, the participant’s vesting percent increases until the participant is 100% vested.



Generally, employees are not allowed to withdraw funds from this type of account while still employed. Note here whether this plan allows unrestricted withdrawal. Note that if withdrawal is allowed for hardship cases, only under certain circumstances, or with the approval of an administrator, the answer is “No, Cannot Withdraw Until Retirement or Termination.”

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main area displays the 'Other Employer Contributions (COE) Part 2 of 2 [Plan: (new)]' dialog box. This dialog has tabs for 'Maximum', 'Vesting', 'Withdraw', 'Guaranteed Rate', and 'Type'. The 'Withdraw' tab is active, showing the question: 'R3H. Can participants at their own discretion withdraw any of these employer contributions while still employed?'. Below this is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are several radio button options: 'Yes', 'Yes, After Age: [ ]', 'Yes, After ASY: [ ]', 'Yes, After OR Age: [ ] ASY: [ ]', 'Yes, After AND Age: [ ] ASY: [ ]', 'Yes, After Age + ASY: [ ]', and 'No, Cannot Withdraw Until Retirement or Termination'. At the bottom of the dialog is a 'Close' button. The taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:48 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
  - COE1
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Other Employer Contributions (COE) Part 2 of 2 [Plan: (new)]**

COE Number: [ ] Description: [ ]

Maximum Vesting **Withdraw** Guaranteed Rate Type

**R3H. Can participants at their own discretion withdraw any of these employer contributions while still employed?**

Define ASY used on this page  
ASY Not Selected

☐ Yes

☐ Yes, After Age: [ ]

☐ Yes, After ASY: [ ]

☐ Yes, After OR Age: [ ] ASY: [ ]

☐ Yes, After AND Age: [ ] ASY: [ ]

☐ Yes, After Age + ASY: [ ]

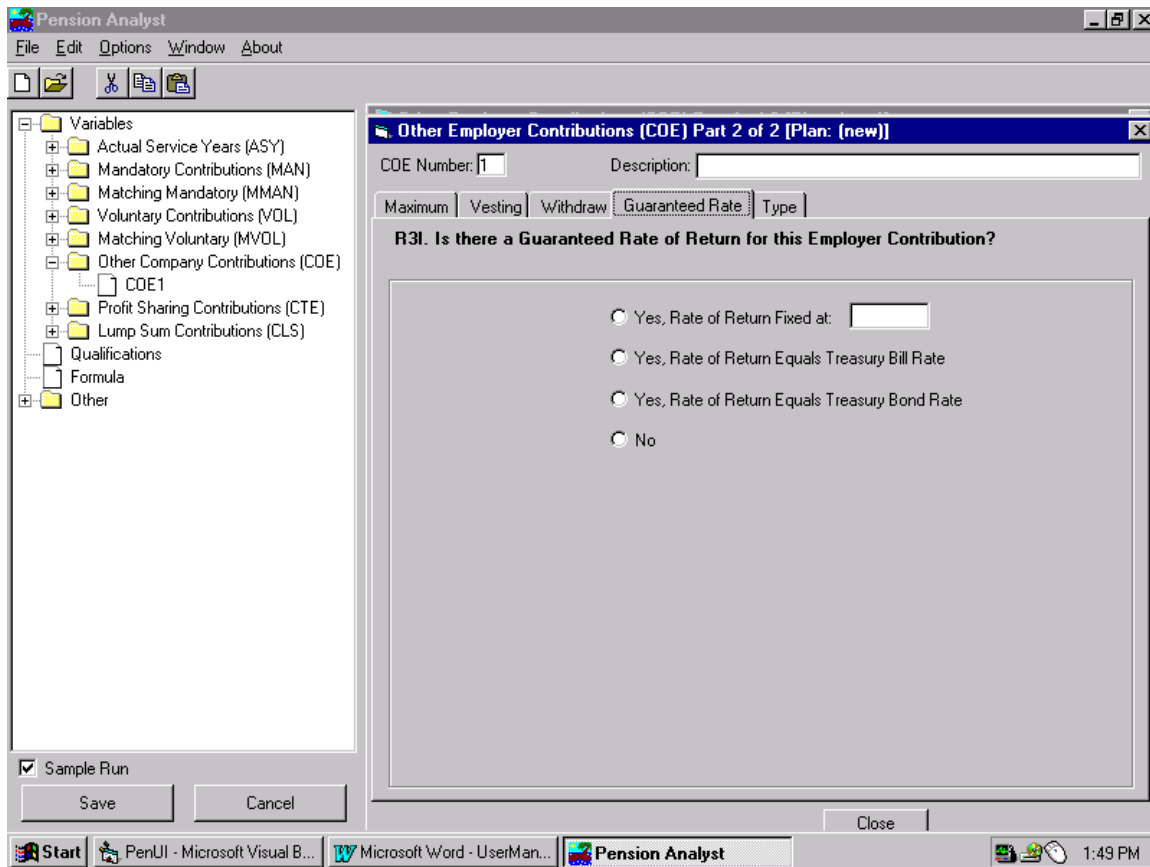
☐ No, Cannot Withdraw Until Retirement or Termination

Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:48 PM



This section generally applies only to Cash Balance plans. By providing a guaranteed rate, cash balance plans are legally defined benefit plans, despite their appearance. For that reason, it is also very important to correctly note the type of plan on the next tab.



There are three areas to address on this screen. First, select the type of plan represented by this COE. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this COE provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The 'COE' folder is expanded, showing 'COE1'. At the bottom left, there is a 'Sample Run' checkbox and 'Save' and 'Cancel' buttons. The main area displays the 'Other Employer Contributions (COE) Part 2 of 2 [Plan: (new)]' dialog box. This dialog has tabs for 'Maximum', 'Vesting', 'Withdraw', 'Guaranteed Rate', and 'Type'. The 'Type' tab is active. It contains the following questions and options:

COE Number:  Description:

Y1. What kind of benefit is this?

Y2. Is the participant allowed to direct the investment of their own funds?  
☐ Yes  
☐ No

Available Investments:

- ☐ Money Market Instruments/Funds
- ☐ Bond Funds
- ☐ Portfolios of Diversified Stock
- ☐ Undiversified Portfolio of the Firm's Own Stock
- ☐ Other

Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?  
☐ Yes ☐ No

At the bottom right of the dialog is a 'Close' button. The Windows taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:49 PM.

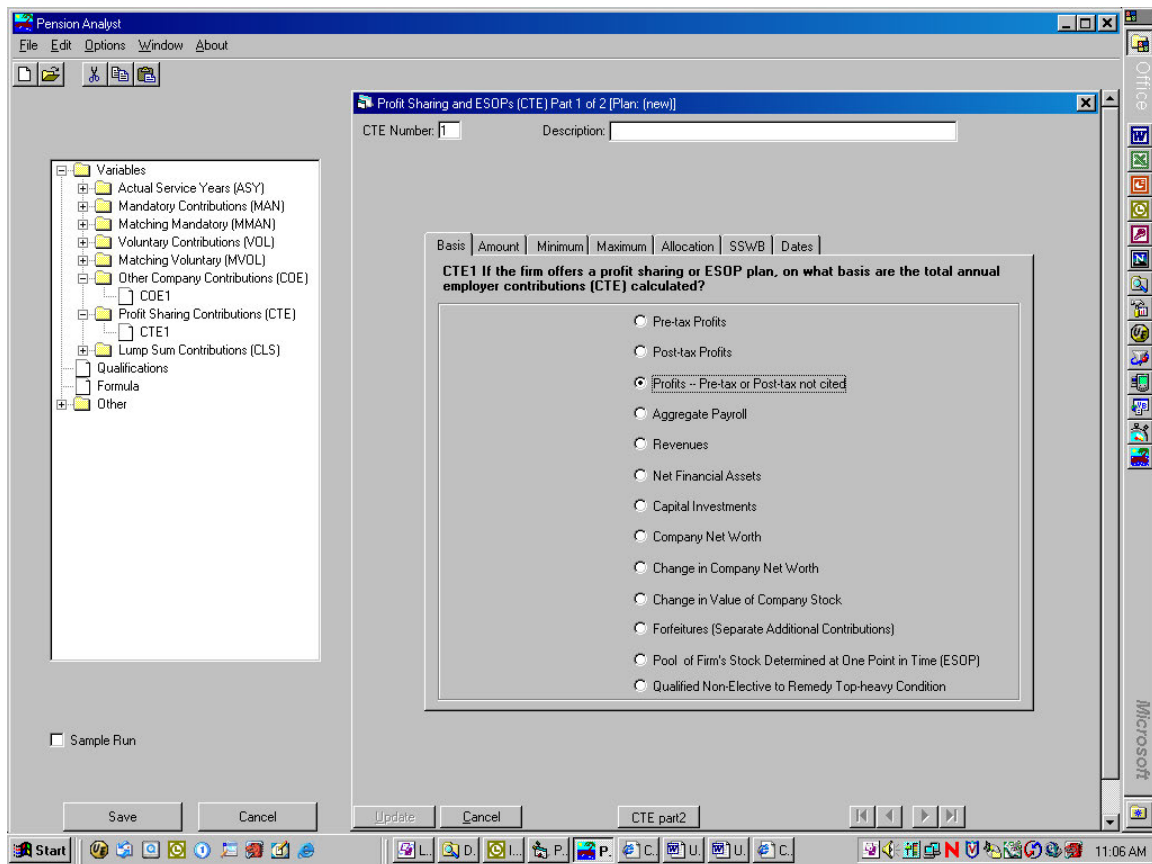
### **Profit Sharing and ESOP Plans (CTE)**

The variable is designed to capture information about profit sharing contributions, Employee Stock Ownership Plans (ESOPs), and Leveraged Employee Stock Ownership Plans (LESOPs). Note that employee stock purchase plans (plans that allow employees to purchase company stock at a small discount to market value) are generally not retirement plans. Employee stock purchase plans are therefore not captured here or elsewhere in this instrument.

If plans do not feature immediate full vesting of all contributions, there will be some funds that revert to the plan each year because employees terminate before becoming fully vested. If these forfeitures are distributed in addition to contributions defined by “regular” CTE formulas and are allocated to the accounts of existing participants, then this should be treated as a separate contribution. If such forfeitures are used to reduce the employer’s current-year contribution, no coding is required for the forfeiture.

Note here the basis for the profit sharing contribution. If this definition involves an ESOP or a LESOP, check the second to the last option, “Pool of Firm’s Stock Determined at One Point in Time”.

A qualified non-elective contribution is a means of correcting a top-heavy condition in a given year. The top-heavy condition is remedied by giving all NON-highly compensated employees an additional contribution. Code this contribution if it is the ONLY means mentioned of remedying a top-heavy condition. If the plan mentions refunding highly-compensated employees' voluntary contributions as a means of remedying the top-heavy condition, do not code a qualified non-elective contribution even if it is mentioned.



Generally, profit sharing contributions are determined yearly, but ESOPs and LESOPs can be a pre-defined amount. “Fixed Dollar Amount” is a very unusual option, since the point of profit sharing contributions is to allow the firm to vary their contributions with profitability. The “Fixed Percentage Rate” does not refer to the participant’s pay, but to the criterion noted on the first tab. For instance, if the firm states that 10% of net profits” will be distributed to employees, “Net Profits” would be checked on the first tab and “.1” would be entered in the “Fixed Percentage Rate” textbox. If the amount is determined annually by managers or the Board of Directors, mark the third option.

If the contribution is a ESOP or LESOP, divide the value of the stock purchased by the number of years over which it will be distributed. Write that amount in the “Fixed Dollar” textbox. If there is insufficient information to determine this in an ESOP, mark the third option.

For forfeitures and qualified non-elective contributions, mark the third option.

The screenshot shows the 'Pension Analyst' software interface. The main window is titled 'Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]'. On the left, there is a 'Variables' tree with folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Profit Sharing Contributions (CTE)' folder is expanded, showing 'CTE1'. Below the tree, there is a 'Sample Run' checkbox and 'Save' and 'Cancel' buttons. The main area of the dialog box contains a 'CTE Number' field with '1' and a 'Description' field. Below these are tabs for 'Basis', 'Amount', 'Minimum', 'Maximum', 'Allocation', 'SSWB', and 'Dates'. The 'Amount' tab is selected. The text 'R2A. Is the total employer contribution calculated at a fixed dollar or percentage set in advance, or is the amount or rate of contribution determined on a yearly basis?' is displayed. There are three radio button options: 'Fixed Dollar Amount' (with a text box), 'Fixed Percentage Rate' (with a text box), and 'Amount of Contribution Determined Yearly'. At the bottom, there are 'Add', 'Edit', 'Delete', 'CTE part2', and 'Close' buttons, along with navigation arrows. The Windows taskbar at the bottom shows the Start button, 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst' with a clock showing 1:49 PM.

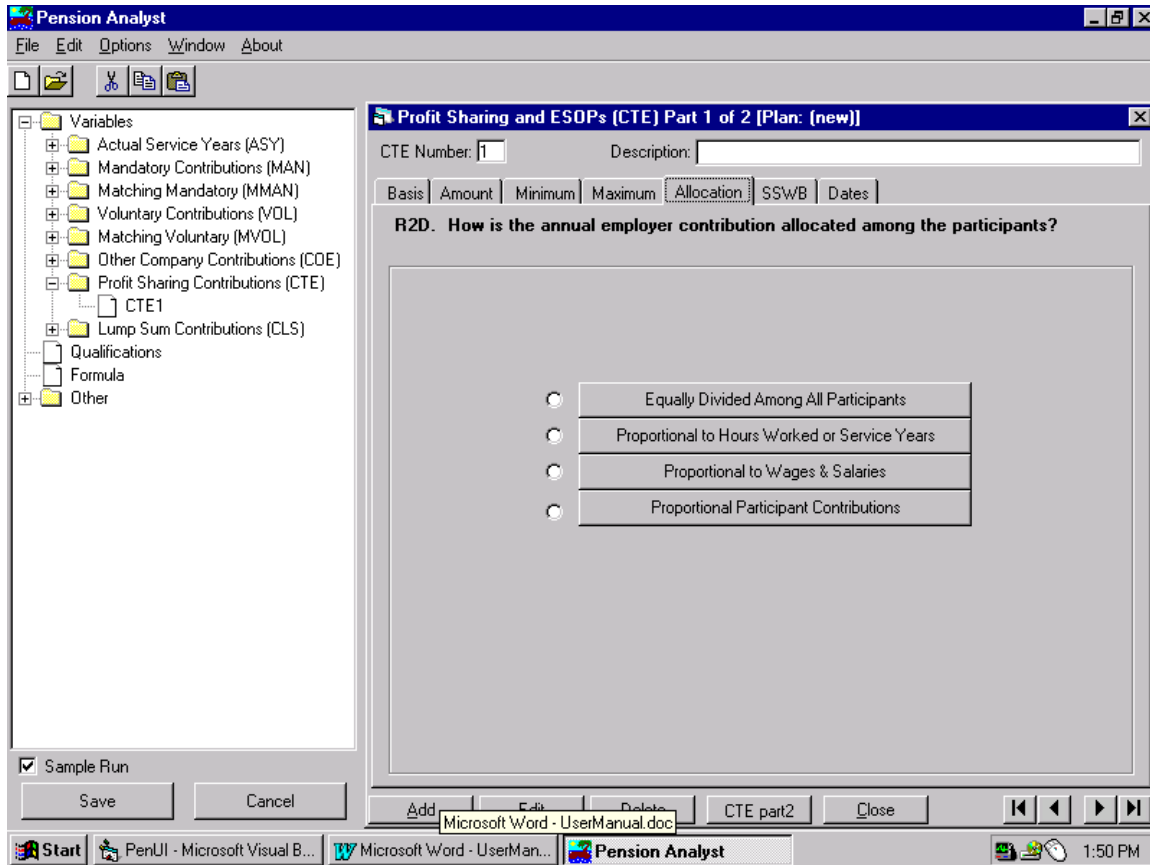
If the plan states that a minimum profit sharing contribution will be made each year, note that here. This is most commonly stated as a minimum percentage of pay.

The screenshot displays the 'Pension Analyst' software interface. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE) with a sub-entry CTE1, Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main window is titled 'Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]'. It features a 'CTE Number' field with the value '1' and a 'Description' field. Below these are tabs for 'Basis', 'Amount', 'Minimum', 'Maximum', 'Allocation', 'SSWB', and 'Dates'. The 'Minimum' tab is selected, showing the question 'R2B. What annual minimums apply to the total employer contributions?'. Three radio button options are present: 'No Minimum: Does Not Apply -- Fixed Contribution Rate', 'Minimum Total Dollars: [text box]', and 'Minimum Percentage: [text box]'. At the bottom of the dialog are buttons for 'Add', 'Edit', 'Delete', 'CTE part2', and 'Close'. The taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock indicates 1:50 PM.

If the plan mentions a maximum profit sharing contribution, note that here. The maximum is most commonly expressed as a percentage of pay.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE) with a sub-entry CTE1, Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main area displays the 'Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]' dialog. It has a 'CTE Number' field set to 1 and a 'Description' field. Below these are tabs for Basis, Amount, Minimum, Maximum, Allocation, SSWB, and Dates. The 'Maximum' tab is selected, showing the question: 'R2C. Aside from IRS maximums, what annual maximums apply to the total employer contribution?'. Three radio button options are present: 'No Maximum: Does Not Apply -- Fixed Contribution Rate', 'Maximum Total Dollars:' followed by an empty text box, and 'Maximum Percentage:' followed by an empty text box. At the bottom of the dialog are buttons for Add, Edit, Delete, CTE part2, and Close. The Windows taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:50 PM.

The profit sharing is often defined as a lump sum of money. Then that lump sum is allocated to employees on the basis of service years, pay, participant contributions, or some other criterion. Note here how the profit sharing sum is allocated to individual employees.





If the allocation defined on the prior tab involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view under 'Variables' containing folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'CTE1', and 'Lump Sum Contributions (CLS)', along with 'Qualifications', 'Formula', and 'Other'. The main area is titled 'Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]'. It has a 'CTE Number' field with '1' and a 'Description' field. Below these are tabs: 'Basis', 'Amount', 'Minimum', 'Maximum', 'Allocation', 'SSWB', and 'Dates'. The 'SSWB' tab is active, displaying the question 'R2E. Do any of the above employer contribution formulas depend on the Social Security Taxable Wage Base (SSWB)?'. There are four radio button options: 'Yes, Actual SSWB in Effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year: [text box]', and 'No'. At the bottom of the dialog are 'Add', 'Edit', 'Delete', 'CTE part2', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows '1:50 PM'.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- CTE1
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

**Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]**

CTE Number: 1 Description:

Basis Amount Minimum Maximum Allocation **SSWB** Dates

**R2E. Do any of the above employer contribution formulas depend on the Social Security Taxable Wage Base (SSWB)?**

☐ Yes, Actual SSWB in Effect Each Year

☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year: [text box]

☐ No

Add Edit Delete CTE part2 Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:50 PM

Generally the CTE definition covers all years. Sometimes a profit sharing contribution was instituted only after a certain date, or it was discontinued after a certain date. Enter here any date limitations on the profit sharing contribution.

For “Before”, “From”, and “To”, the date is calculated in this manner:

(MONTH - 1) divided by 12 plus YEAR.

For “After”, the date is calculated in the following manner:

MONTH divided by 12 plus YEAR.

The screenshot shows the "Pension Analyst" software window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE) with a sub-entry CTE1, Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main window is titled "Profit Sharing and ESOPs (CTE) Part 1 of 2 [Plan: (new)]". It contains a "CTE Number" field with the value "1" and a "Description" field. Below these are tabs for "Basis", "Amount", "Minimum", "Maximum", "Allocation", "SSWB", and "Dates". The "Dates" tab is selected, showing a question: "R2F. Are the above employer contributions based only on specific calendar time periods, or on all years covered by this pension plan?". There are four radio button options: "Covers all years: no specific dates cited." (selected), "Before:" with a date field set to "12/1999", "After:" with a date field set to "12/1999", and "From:" with a date field set to "12/1999" and "To:" with a date field set to "12/1999". At the bottom of the dialog are buttons for "Add", "Edit", "Delete", "CTE part2", and "Close". The taskbar at the bottom shows the Start button and open applications: "PenUI - Microsoft Visual B...", "Microsoft Word - UserMan...", and "Pension Analyst". The system clock shows "1:50 PM".

Plans often do not intend to provide this benefit to part-time or seasonal workers, so they require some minimum threshold of work before they will count a year. For instance a plan may require an employee to work 1,600 hours before they will count the year as a year of service for pension purposes. If working less than 1,600 hours results in no service counted, the second option would be checked and “1600” would be entered in the first text box.

If a plan states that the employee must be employed in each month but specifies no minimum hours, code that as 12 months per year and one hour per month.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'CTE1', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The main area displays the 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]' dialog box. This dialog has tabs for 'Eligible', 'Require', 'Begin', 'Maximum Age/ASY', 'Vesting', 'Withdraw', and 'Type'. The 'Eligible' tab is selected, showing a question: 'R2G. Are participants eligible for employer contributions for each year they meet minimum employment requirements, or does the amount of the contribution depend on the actual'. Below this are four radio button options:
 

- ☐ Full Contribution for Each Year Employed, No Minimum Work Requirements
- ☐ Contribution Either Full or Zero: Full Contribution for Each Year Worked a Minimum of: [ ] Hours Per Year
- ☐ Contribution a Prorated Fraction From Zero to One; Full Contribution in Each Year Worked a Minimum of: [ ] Weeks Per Year, AND [ ] Hours Per Week
- ☐ Contribution a Prorated Fraction From Zero to More than a Full Contribution; Full Contribution in Each Year Worked a Minimum of: [ ] Months Per Year, AND [ ] Hours Per Month

 At the bottom of the dialog are 'Sample Run', 'Save', and 'Cancel' buttons. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:50 PM.

Generally, there are no special requirements to receive these employer contributions. Sometimes, though, the contribution is only given to employees who were employed at a certain point or period in the past (i.e., the employer is phasing out the benefit). Note here any special requirement needed to receive this benefit.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)' (with sub-item 'CTE1'), 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'Sample Run' checkbox is checked. At the bottom are 'Save' and 'Cancel' buttons. The main area displays a dialog box titled 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]'. It has tabs for 'Eligible', 'Require', 'Begin', 'Maximum Age/ASY', 'Vesting', 'Withdraw', and 'Type'. The 'Require' tab is active, showing the question: 'RH2. To receive any of the above employer contributions, are there any other special requirements?'. Below this are several radio button options: 'No Other Special Requirements', 'Employer Approval Required', 'Past Service Required', 'If Plan Participant on: 12 / 1999', 'If Plan Participant Before: 12 / 1999', 'If Plan Participant After: 12 / 1999', and 'If Plan Participant From: 12 / 1999 To: 12 / 1999'. A 'Close' button is at the bottom right of the dialog. The Windows taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:50 PM.

An employer sometimes requires that an employee achieve a certain age or tenure before beginning to make these contributions. Note here any such limitations described in the plan.

The screenshot displays the 'Pension Analyst' software interface. On the left is a 'Variables' tree with folders for 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'Lump Sum Contributions (CLS)', 'Qualifications', 'Formula', and 'Other'. The 'CTE' folder is expanded, showing 'CTE1'. Below the tree are 'Sample Run' (checked), 'Save', and 'Cancel' buttons. The main window is titled 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]'. It has tabs for 'Eligible', 'Require', 'Begin', 'Maximum Age/ASY', 'Vesting', 'Withdraw', and 'Type'. The 'Begin' tab is active, showing the question 'R2J. When does the employer begin to make these contributions on behalf of the participant?'. Five radio button options are listed: 'At Onset of Employment', 'After Employee Reaches Age: [ ]', 'After Employee Completes First # Years: [ ]', 'After Employee Reaches Age: [ ] OR After Completes First # Years: [ ]', and 'After Employee Reaches Age: [ ] AND After Completes First # Years: [ ]'. The 'Close' button is at the bottom right. The taskbar at the bottom shows 'Start', 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', 'Pension Analyst', and a clock showing 1:51 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
  - CTE1
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]**

CTE Number: 1 Description:

Eligible Require **Begin** Maximum Age/ASY Vesting Withdraw Type

**R2J. When does the employer begin to make these contributions on behalf of the participant?**

☐ At Onset of Employment

☐ After Employee Reaches Age: [ ]

☐ After Employee Completes First # Years: [ ]

☐ After Employee Reaches Age: [ ]  
OR After Completes First # Years: [ ]

☐ After Employee Reaches Age: [ ]  
AND After Completes First # Years: [ ]

Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... **Pension Analyst** 1:51 PM

A plan sometimes specifies a maximum age or number of service years beyond which contributions will no longer be made on behalf of the participant. Although this sort of provision is rare, code it here when it is mentioned. Be sure to specify which ASY are counted (“Define ASY used on this page”) if ASY is used in the maximum.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main window displays the 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]' dialog. It has tabs for Eligible, Require, Begin, Maximum Age/ASY, Vesting, Withdraw, and Type. The 'Maximum Age/ASY' tab is active, showing a question: 'R2K. Is there a maximum age or service years after which employer contributions are no longer made on behalf of the participant?'. Below this is a section 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are six radio button options for different maximum conditions, each with associated input fields for Age and ASY. The 'No' option is also available. At the bottom of the dialog are 'Save', 'Cancel', and 'Close' buttons. The Windows taskbar at the bottom shows the Start button and several open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:51 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
  - CTE1
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]**

CTE Number:  Description:

Eligible Require Begin **Maximum Age/ASY** Vesting Withdraw Type

**R2K. Is there a maximum age or service years after which employer contributions are no longer made on behalf of the participant?**

Define ASY used on this page

☐ Yes, Maximum Age:   
☐ Yes, Maximum ASY:   
☐ Yes, Maximum Age + ASY:   
☐ Yes, When Over Maximum Age:   
 OR Over Maximum ASY:   
☐ Yes, When Over Maximum Age:   
 AND Over Maximum ASY:   
☐ No

Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:51 PM

Typically, a participant must stay with a company for a certain period of time before earning a non-forfeitable right to a pension benefit. Those provisions will be entered here. Sometimes, participants are immediately vested from their first date of participation in the plan. In that case, mark the first option. The term “cliff vesting” refers to a milestone that must be passed. Before that milestone is passed, the participant is zero percent vested. After the milestone, the participant is 100% vested.

The term “step vesting” refers to a more gradual process of vesting in which, over a period of years, the participant’s vesting percent increases until the participant is 100% vested.

The first option, “Same As” provides a shorthand way to define this vesting schedule if an identical vesting schedule has been defined elsewhere in the plan. Only use this option if the vesting for this benefit is identical to the vesting schedule previously defined.

The screenshot shows the Pension Analyst software interface. The main window is titled "Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]". It has a menu bar with "File", "Edit", "Options", "Window", and "About". Below the menu bar is a toolbar with icons for file operations. On the left is a tree view of variables, including "Actual Service Years (ASY)", "Mandatory Contributions (MAN)", "Matching Mandatory (MMAN)", "Voluntary Contributions (VOL)", "Matching Voluntary (MVOL)", "Other Company Contributions (COE)", "Profit Sharing Contributions (CTE)", "Lump Sum Contributions (CLS)", "Qualifications", "Formula", and "Other". The "Profit Sharing Contributions (CTE)" folder is expanded, showing "CTE1". At the bottom left, there is a "Sample Run" checkbox and "Save" and "Cancel" buttons. The main area of the window is titled "R2L. What is the vesting schedule that applies to these employer contributions?". It contains a "Define ASY used on this page" dropdown menu with "ASY Not Selected" selected. Below this are five radio button options: "Same As: None Defined", "Immediate 100% Vesting From the Time of Initial Participation", "Cliff Vesting: Vesting Increases from 0% to 100% When:", "Step Vesting:", and "No Vesting Schedule Cited". At the bottom right, there is a "Close" button. The taskbar at the bottom shows the Start button, several open applications (PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., Pension Analyst), and the system clock showing 1:51 PM.

Generally, employees are not allowed to withdraw these funds while still employed. Occasionally, a plan will provide for withdrawals while the participant is employed. Note here whether such a provision exists.

The screenshot displays the 'Pension Analyst' software interface. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), CTE1, Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main window is titled 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]'. It features a 'CTE Number' field with the value '1' and a 'Description' field. Below these are tabs for 'Eligible', 'Require', 'Begin', 'Maximum Age/ASY', 'Vesting', 'Withdraw', and 'Type'. The 'Withdraw' tab is active, showing a question: 'R2M. Can participants at their own discretion withdraw any of these employer contributions while still employed?'. A dropdown menu labeled 'Define ASY used on this page' is set to 'ASY Not Selected'. Below this are several radio button options: 'Yes', 'Yes, After Age: [ ]', 'Yes, After ASY: [ ]', 'Yes, After OR Age: [ ] ASY: [ ]', 'Yes, After AND Age: [ ] ASY: [ ]', 'Yes, After Age + ASY: [ ]', and 'No, Cannot Withdraw Until Retirement or Termination'. At the bottom, there are 'Sample Run', 'Save', and 'Cancel' buttons. The taskbar shows the Start button, open applications like 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserManual.doc', and 'Pension Analyst', along with the system clock showing 1:51 PM.



There are three areas to address on this screen. First, select the type of plan represented by this CTE. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this CTE provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), Qualifications, Formula, and Other. The main area displays the 'Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]' dialog box. This dialog has tabs for Eligible, Require, Begin, Maximum Age/ASY, Vesting, Withdraw, and Type. The 'Type' tab is active, showing questions Y1, Y2, and Y4. Y1 asks for the kind of benefit with a dropdown menu. Y2 asks if the participant can direct their own investments, with radio buttons for Yes/No and a list of available investments: Money Market Instruments/Funds, Bond Funds, Portfolios of Diversified Stock, Undiversified Portfolio of the Firm's Own Stock, and Other. Y4 asks if borrowing is allowed, with radio buttons for Yes/No. At the bottom are 'Sample Run', 'Save', 'Cancel', and 'Close' buttons. The taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:51 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
  - CTE1
- Lump Sum Contributions (CLS)
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Profit Sharing and ESOPs (CTE) Part 2 of 2 [Plan: (new)]**

CTE Number: 1 Description:

Eligible Require Begin Maximum Age/ASY Vesting Withdraw Type

**Y1. What kind of benefit is this?**

**Y2. Is the participant allowed to direct the investment of their own funds?**

☐ Yes ☐ No

Available Investments

- ☐ Money Market Instruments/Funds
- ☐ Bond Funds
- ☐ Portfolios of Diversified Stock
- ☐ Undiversified Portfolio of the Firm's Own Stock
- ☐ Other

**Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?**

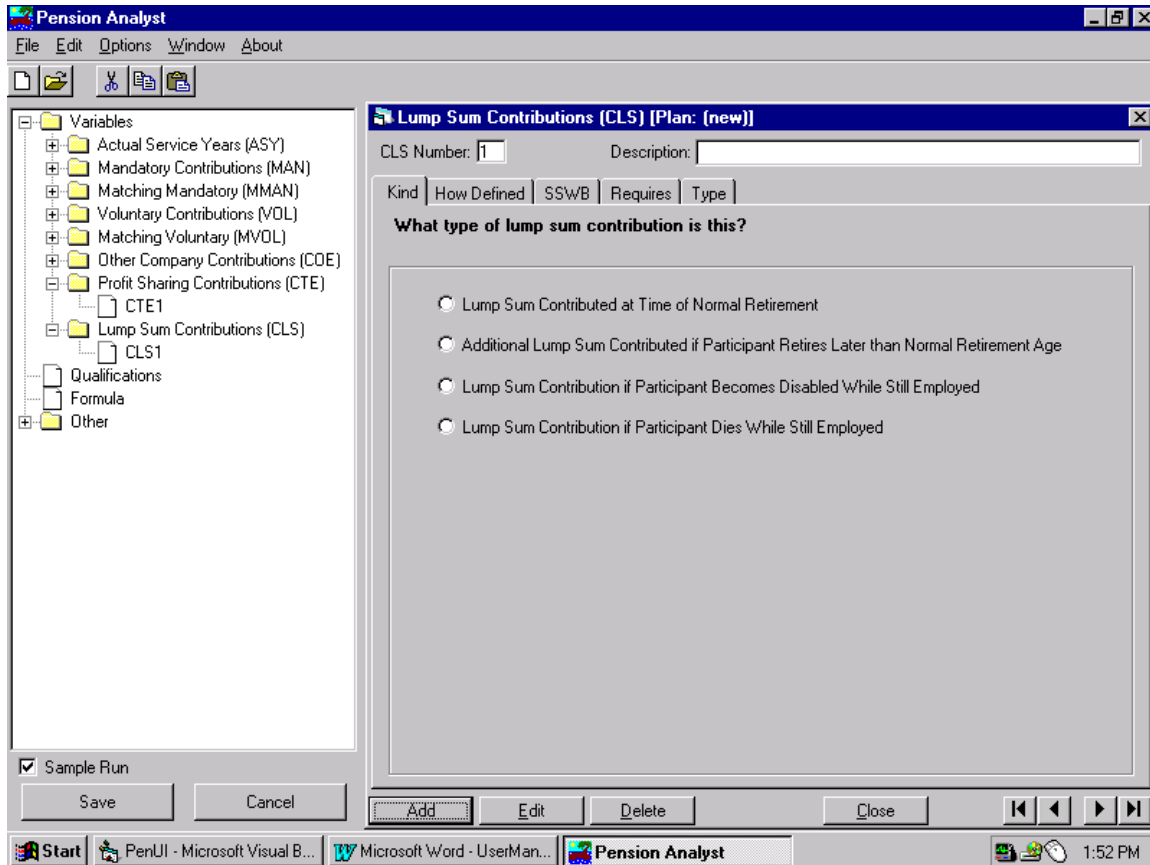
☐ Yes ☐ No

Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:51 PM

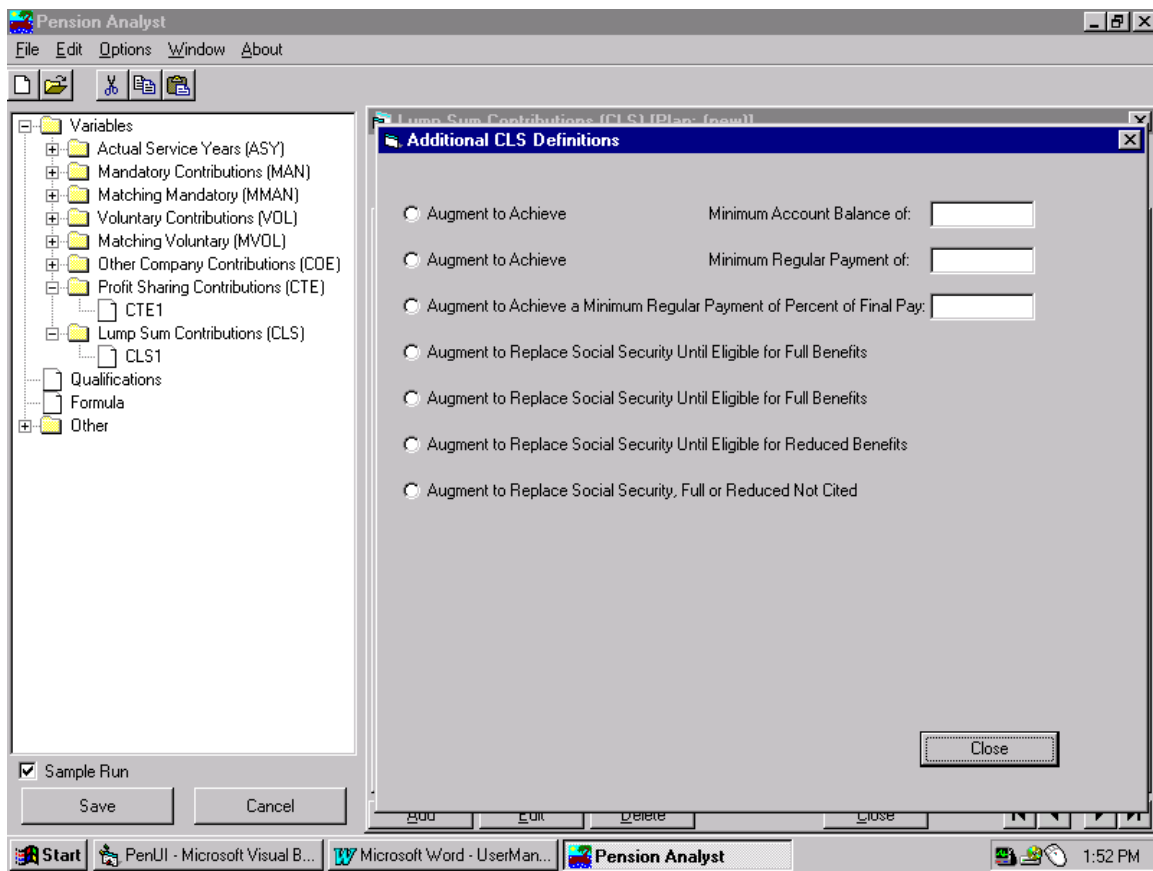
## Lump Sum Contributions (CLS)

Lump sum benefits are benefits that do not accrue over time, but are paid out by the firm at the employee's separation from service. Note here the type of separation this lump sum benefit applies to. If more than one type of separation is involved, define another CLS.



Although lump-sum payments are quite unusual, a few plans provide these benefits at retirement. Note here how the lump sum is determined.

The screenshot shows the 'Pension Analyst' software window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'CTE1', 'Lump Sum Contributions (CLS)', 'CLS1', 'Qualifications', 'Formula', and 'Other'. The 'Lump Sum Contributions (CLS) [Plan: (new)]' dialog box is open, showing the 'How Defined' tab. It contains fields for 'CLS Number' (1) and 'Description'. Below, it asks 'How is this lum-sum contribution (CLS) determined?' with radio button options: 'Pre-Tax', 'Post-Tax', and 'Not Cited' (selected). A dropdown menu for 'Define ASY used on this page' shows 'ASY Not Selected'. Further down are options for 'Fixed Dollar Amount', 'Fixed Percentage of up to Maximum' (with 'Pay' and 'Contribution' sub-fields), 'Fixed Percentage of Pay at or Below SSWB', 'Fixed Percentage of Pay Above SSWB', 'Fixed Percentage of Pay Above SSWB up to Maximum' (with 'Contribution' sub-field), and 'Varying Dollar or Percentage' (with a 'Table' button). A button labeled 'For Additional Options, Press Here' is at the bottom of the dialog. The main window has a menu bar (File, Edit, Options, Window, About) and a toolbar. The taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:52 PM.



If the option marked on the prior tab involved a percentage of pay above or below Social Security Wage Base, mark the appropriate option here. Note that "covered compensation" is generally defined as career average SSWB.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including 'Actual Service Years (ASY)', 'Mandatory Contributions (MAN)', 'Matching Mandatory (MMAN)', 'Voluntary Contributions (VOL)', 'Matching Voluntary (MVOL)', 'Other Company Contributions (COE)', 'Profit Sharing Contributions (CTE)', 'CTE1', 'Lump Sum Contributions (CLS)', 'CLS1', 'Qualifications', 'Formula', and 'Other'. The 'Lump Sum Contributions (CLS) [Plan: (new)]' dialog box is open, showing the 'SSWB' tab. It contains a 'CLS Number' field, a 'Description' field, and a section titled 'Does this lump-sum contribution depend on the Social Security Taxable Wagebase (SSWB)?' with four radio button options: 'Yes, Actual SSWB in Effect Each Year', 'Yes, Career Average SSWB Calculated Each Year', 'Yes, Career Average SSWB Estimated in Year: [ ]', and 'No'. The 'Sample Run' checkbox is checked at the bottom left. The taskbar at the bottom shows the Start button and open applications: 'PenUI - Microsoft Visual B...', 'Microsoft Word - UserMan...', and 'Pension Analyst'. The system clock shows 1:52 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- CTE1
- Lump Sum Contributions (CLS)
- CLS1
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Lump Sum Contributions (CLS) [Plan: (new)]**

CLS Number: [ ] Description: [ ]

Kind How Defined **SSWB** Requires Type

**Does this lump-sum contribution depend on the Social Security Taxable Wagebase (SSWB)?**

☐ Yes, Actual SSWB in Effect Each Year

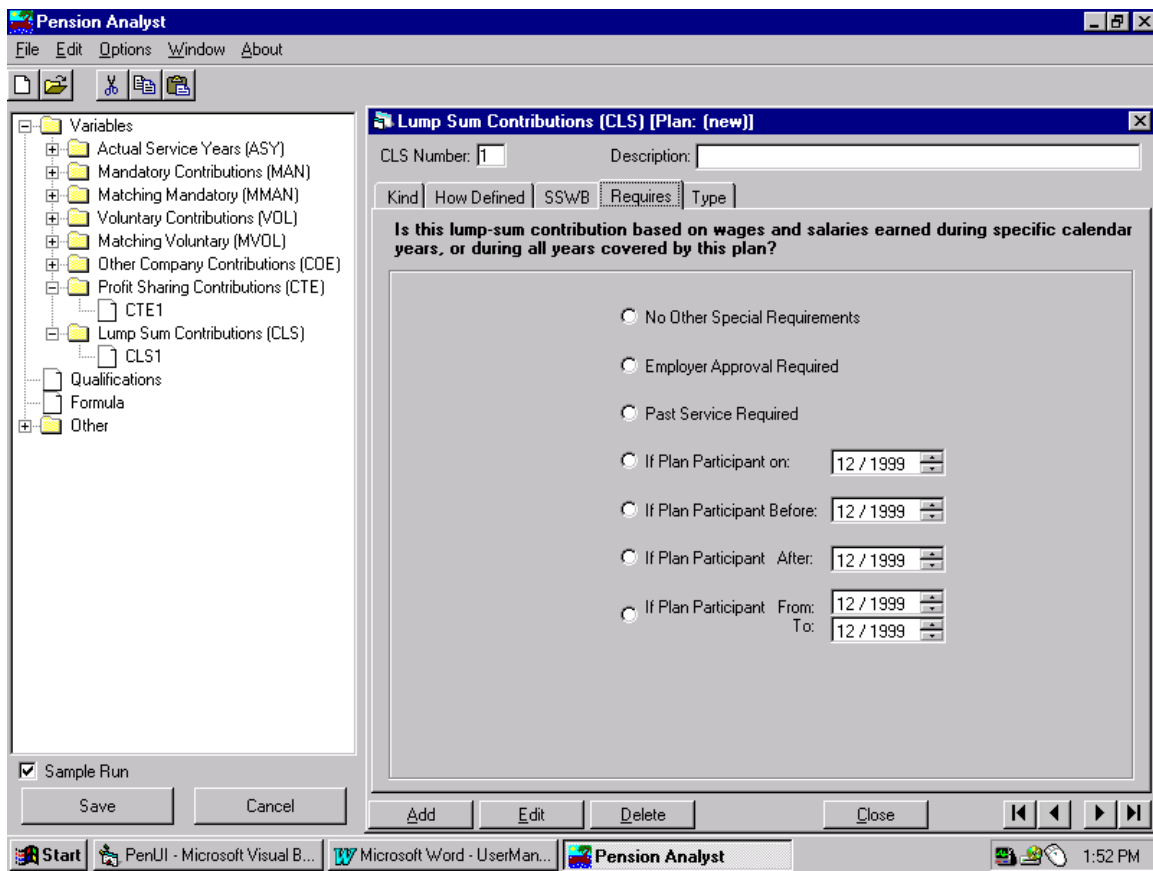
☐ Yes, Career Average SSWB Calculated Each Year

☐ Yes, Career Average SSWB Estimated in Year: [ ]

☐ No

Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:52 PM



There are three areas to address on this screen. First, select the type of plan represented by this CLS. Next note whether the participant directs the investment of their own funds. If so, note the types of investments available. Lastly, some plans allow the participant to borrow from their account. Note whether this CLS provides that option.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), and Qualifications. The 'Lump Sum Contributions (CLS) [Plan: new]' dialog box is open, displaying fields for CLS Number (1) and Description. It has tabs for Kind, How Defined, SSWB, Requires, and Type. The 'Type' tab is active, showing questions Y1, Y2, and Y4. Y1 asks for the kind of benefit with a dropdown menu. Y2 asks if the participant can direct their own investments, with radio buttons for Yes and No, and a list of available investments: Money Market Instruments/Funds, Bond Funds, Portfolios of Diversified Stock, Undiversified Portfolio of the Firm's Own Stock, and Other. Y4 asks if the participant can borrow money from the fund, with radio buttons for Yes and No. The dialog box has buttons for Add, Edit, Delete, Close, Save, and Cancel. The Windows taskbar at the bottom shows the Start button and open applications: PenUI - Microsoft Visual B..., Microsoft Word - UserMan..., and Pension Analyst. The system clock shows 1:52 PM.

**Pension Analyst**

File Edit Options Window About

Variables

- Actual Service Years (ASY)
- Mandatory Contributions (MAN)
- Matching Mandatory (MMAN)
- Voluntary Contributions (VOL)
- Matching Voluntary (MVOL)
- Other Company Contributions (COE)
- Profit Sharing Contributions (CTE)
- Lump Sum Contributions (CLS)
  - CLS1
- Qualifications
- Formula
- Other

☒ Sample Run

Save Cancel

**Lump Sum Contributions (CLS) [Plan: new]**

CLS Number: 1 Description:

Kind How Defined SSWB Requires Type

**Y1. What kind of benefit is this?**

**Y2. Is the participant allowed to direct the investment of their own funds?**

☐ Yes
 ☐ No

Available Investments

- ☐ Money Market Instruments/Funds
- ☐ Bond Funds
- ☐ Portfolios of Diversified Stock
- ☐ Undiversified Portfolio of the Firm's Own Stock
- ☐ Other

**Y4. Can the participant, at their own discretion, borrow money from the fund provided by this benefit?**

☐ Yes
 ☐ No

Add Edit Delete Close

Start PenUI - Microsoft Visual B... Microsoft Word - UserMan... Pension Analyst 1:52 PM

## Age & Service Requirements for DC Plans (CRAS)

If the plan offers annuity benefits, note here any combinations of age and service years required to be immediately eligible for a benefit at the time of termination. Some plans offer no annuity, but only pay out a lump sum their participants at separation. Ignore this question for such plans.

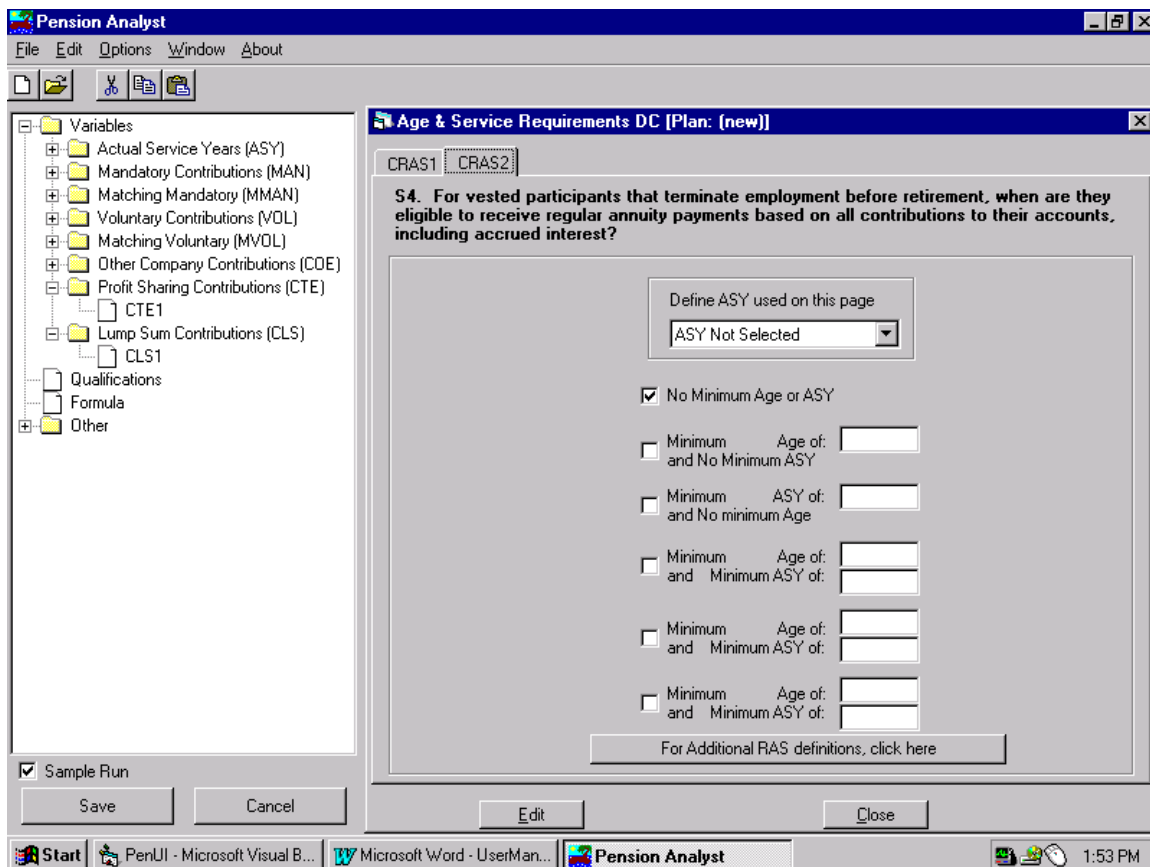
This is one of the few areas in which multiple items can be used. Note that there are several Age and ASY combinations to accommodate multiple qualification criteria. If other criteria are used, click the “For Additional RAS, click here” button. The options on that page are self-explanatory.

The screenshot shows the 'Pension Analyst' application window. On the left is a tree view of variables including Actual Service Years (ASY), Mandatory Contributions (MAN), Matching Mandatory (MMAN), Voluntary Contributions (VOL), Matching Voluntary (MVOL), Other Company Contributions (COE), Profit Sharing Contributions (CTE), Lump Sum Contributions (CLS), and Qualifications. The main area displays the 'Age & Service Requirements DC [Plan: (new)]' dialog box. This dialog has tabs for 'CRAS1' and 'CRAS2'. The 'CRAS1' tab is active, showing question S3: 'Aside from vesting requirements, what minimum combination of age and actual service years are required (CRAS) to receive annuity benefits from this defined contribution plan?'. Below the question is a section titled 'Define ASY used on this page' with a dropdown menu set to 'ASY Not Selected'. There are five checkboxes for different qualification criteria: 'No Minimum Age or ASY' (checked), 'Minimum Age of: [ ] and No Minimum ASY', 'Minimum ASY of: [ ] and No minimum Age', 'Minimum Age of: [ ] and Minimum ASY of: [ ]', and 'Minimum Age of: [ ] and Minimum ASY of: [ ]'. At the bottom of the dialog is a button labeled 'For Additional RAS definitions, click here'. The application's status bar at the bottom shows the Start button, open files (PenUI - Microsoft Visual B..., Microsoft Word - UserMan...), and the Pension Analyst application, along with the system clock showing 1:53 PM.

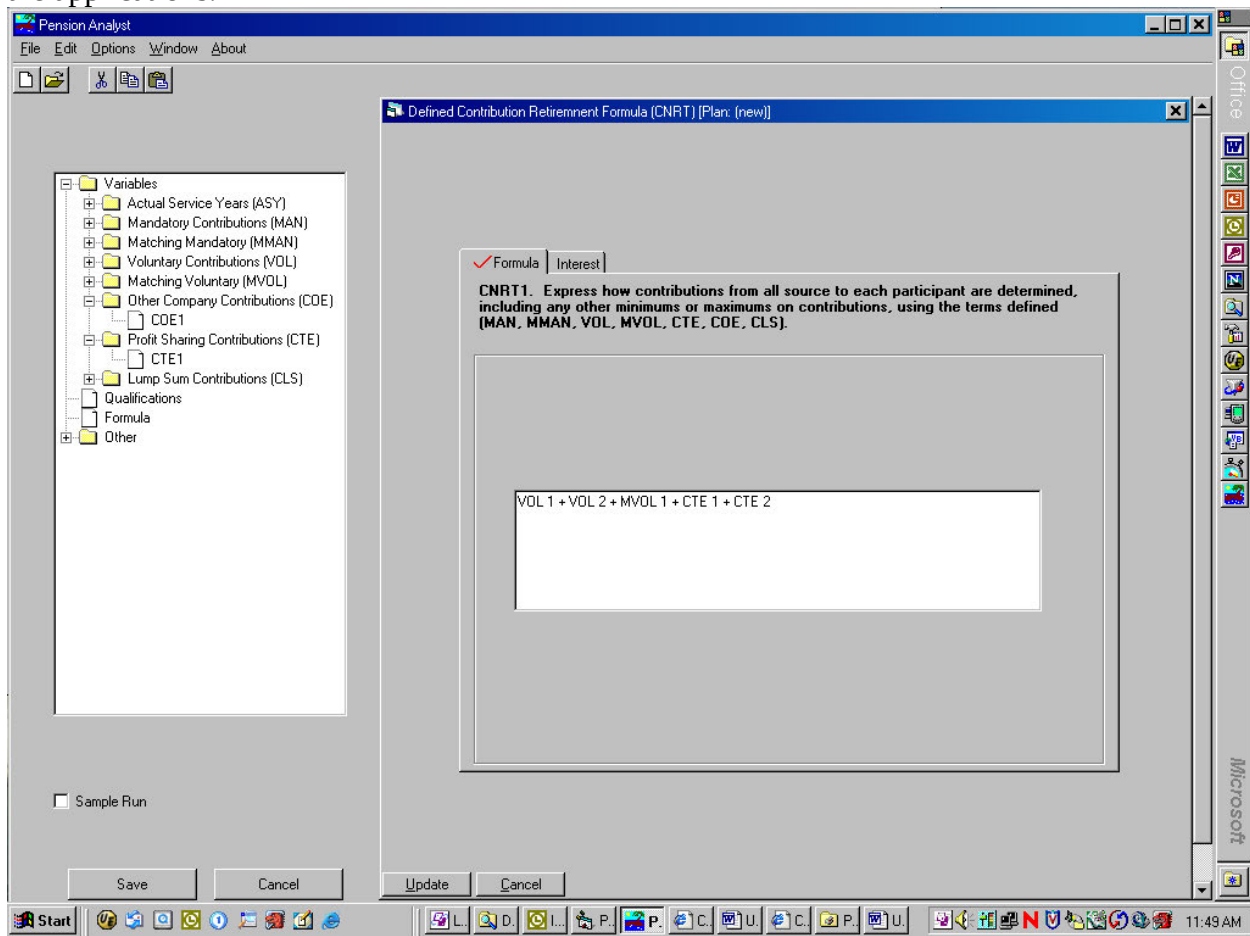


If the plan pays an annuity benefit sometime after the participant leaves employment (analogous to a deferred vested benefit in a defined benefit plan), note here the combinations of age and service years at which benefits begin. Note that at separation, service years are “frozen”. That is, since the employee is no longer working for the firm, these ASYs no longer accrue. Nevertheless, the number of service years at termination sometimes determine the age at which annuity benefits begin.

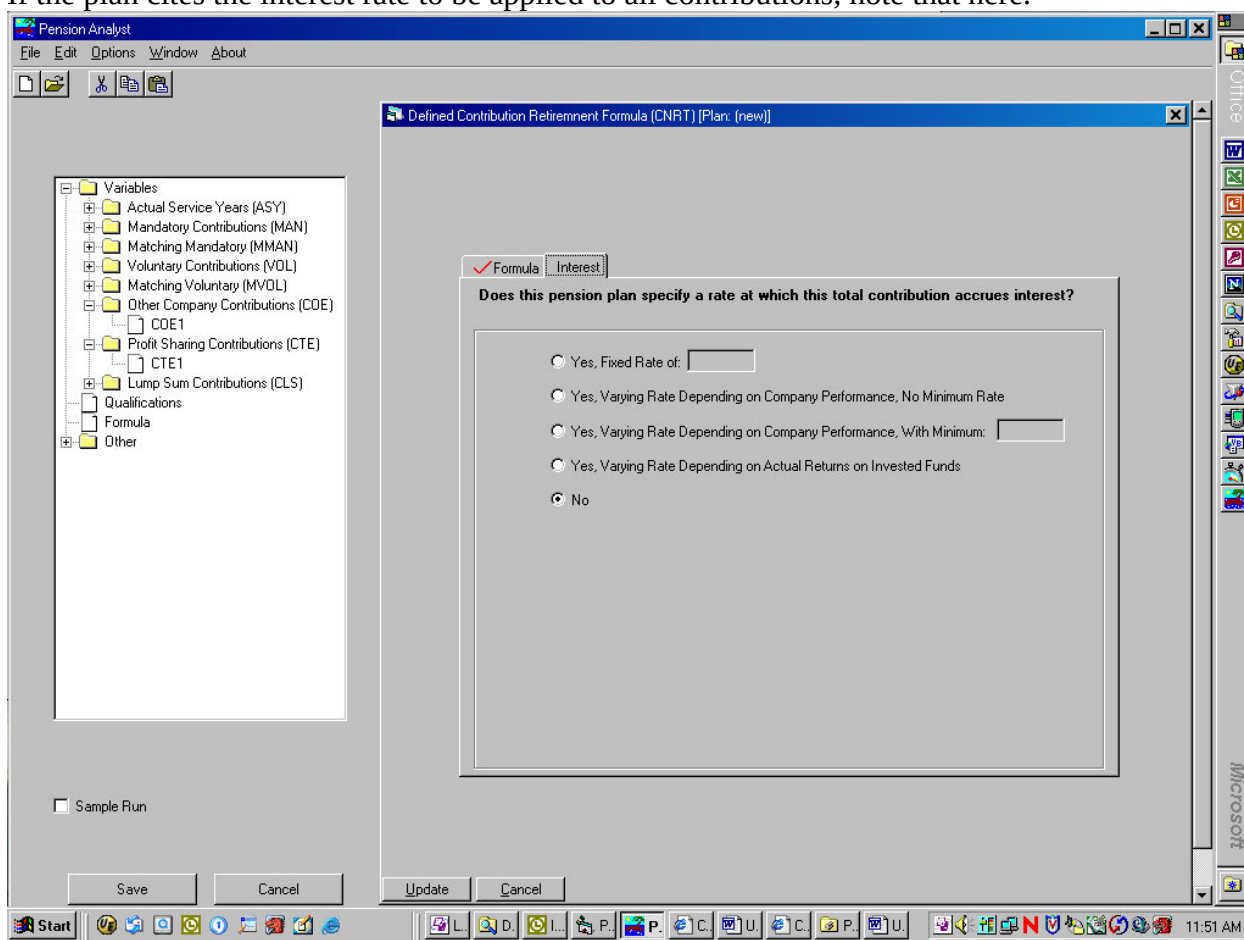
This is one of the few areas in which multiple items can be used. Note that there are several Age and ASY combinations to accommodate multiple qualification criteria. If other criteria are used, click the “For Additional RAS, click here” button. The options on that page are self-explanatory.



The defined contribution retirement formula (CNRT) is where the contribution variables from a defined contribution plan are combined. The formula is substantially simpler than its defined benefit counterparts, because it is usually simply the sum of the contributions defined earlier in the applications.



If the plan cites the interest rate to be applied to all contributions, note that here.



## APPENDIX

### A. Vesting Schedule

### B. Date Field

### C. Withdraw Tab for DC Plans

- Disregard “hardship” withdrawal provisions. If only hardship withdrawals allowed, code as “No withdrawal”
- Round withdrawal age 59 ½ . Code as 60.

### D. Defining RAS in formulas:

- Vested Deferred Benefits

Suppose vesting schedule is 65 years or 5 ASYs. Formulas for Vested Deferred Retirement are

$$VD1 = NR1, BEG = 65$$

$$VD2 = ER1, BEG = 55$$

$$VDT = \max(VD1, VD2)$$

Plan says that you need to be vested to get these benefits, i.e. must be 65 year old or have 5 year of service. In this case, define RAS as “No Minimum Age or ASY”. If you define RAS as just “5 ASY” then someone who is 66 and had only 2 years of service would not be able to get these benefits. But, according to vesting schedule, he is vested hence entitled to these benefits. In this case we define “No Minimum Age or ASY” for RAS and let vesting schedule take care of the benefits start date.

- Normal Benefits

- o Suppose vesting schedule is 65 years or 5 ASYs. Normal Retirement formula is

$$NR1 = 1\% * FAP1 * ASY1$$

$$NRT = NR1$$

Must be 65 AND 5 to receive these benefits. Can define RAS=65 here, not 65 and 5.

- o Vesting schedule 65 year or 5 ASY. If the plan says that “if you are vested, you can retire at 62 with unreduced benefits”. Here we need RAS = 62 and 5, not just 62 (this is different from the example above). The difference is that you have to be vested to retire at 62 with benefits, i.e. you have to have 5 year

of service. If you are 62 and have only 3 years of service, you can't get this benefit.

- Early Formulas

ER formulas have multiple RASs (30 ASY, 60/10, 85/55). If participant qualifies for vested deferred, he can start payments at "his early retirement age".

**Question:** what is our BEG for vested deferred here? Because of RAS=30 ASY, early retirement age can be anytime after 30 years of work, for example at age 50 (if he starts at age 20). If you just set BEG to "At Early Retirement", the program hard-wires age 55 to BEG.

**Answer:** Coders should avoid "Begins at" normal or early retirement. They should just code it as a combination of RASs and BEGs. Of course, you likely end up with lots more VD formulas than you had ER formulas, but that's OK. Just check them really carefully when you get to the simulation.

RAS = 30 ASY BEG = Immediately

RAS = 10 ASY BEG = Age 60

RAS = age 55 BEG = when AGE + ASY would equal 85

E. Plan type: money purchase, thrift/saving

- COE is almost always a money purchase unless it's a cash balance plan.
- Thrift/savings refers to a post/tax VOL only.

F. Investment options

"Other" is intended for investments that are not stocks, bonds, money market funds or the company's own stock. A real estate investment trust is a stock, so it is not "Other". If you can directly invest in real estate, that would definitely be "Other". Most all alternatives offered by a mutual fund company are covered in money market funds, bonds and stocks.

They may have value stocks or index stocks or a blend of stocks and bonds, but basically everything Fidelity or Vanguard have falls in those broad categories.

"Other" very rarely comes up any more. A common investment used to be insurance company investment contracts that are no longer offered. These used to be the most common "Other" investment.

G. Dates in Plan Information and Dates tabs

- If the plan says the "effective date of this plan is 10/1/98", it is less certain that there was no plan before that (they started this plan with more generous vesting to replacing another plan started in 1985, so we would not want to date-qualify benefits). If the wording is the "Original Effective date of this plan is 10/1/98", then I would date-qualify the benefits. Another wording you see is "We first began our plan in ...". There too, we would date-qualify all benefits

#### H. History

- Just in terms of history, really old large firms had DBs and they generally added DCs in the late 70s or early 80s. Generally the DC did not replace the DB.
- Smaller and newer firms in the 80s often did not have any plan, because DBs are expensive and somewhat risky to administer (employer takes the investment risk). So often when you see a firm like Harris, the new DC in 1982 is, in fact, the whole story.
- In the late 90s, a new "DB" was started that looked a lot like a DC, called a cash balance plan. These plans often did replace the DBs. These are particularly problematic for us because they often have a beginning balance that derives from the present value of the old plan, and 1} we don't currently have the programming to do that properly, 2} they very rarely provide sufficient information to derive that present value if we did have the code to implement it.

#### I. Interest Tab In Formulas

- This tab should always be filled. "No" is there because there used to be contributions to accounts that did not bear interest.

#### J. The Spouse Coverage tab of Special Provisions

- SP7 should be answered for all plans. It could be blank if no joint and survivor annuities are mentioned. SP8 should only be answered for DB plans. For a DC, mark all kinds of retirement mentioned.
- Q: What happens if, for example, there is a 50% J&S annuity available but the plan does not explicitly say that it is available under "NORMAL" retirement. Just says that "when you retire, you can take 50% joint and survivor annuity. Do we mark anything on SP7 then? Or do we specifically look for words like "normal retirement", "early retirement" when annuities options are discussed?

A: If the DC (or DB) has a J&S, we assume it is applicable to all retirement circumstances discussed unless it is specifically excludes some circumstance. This DOES happen. For a DC, if it just says you can take a payout as a J&S annuity, you would include the retirement circumstances mentioned. Most frequently in a DC, those are normal, early and vested, although late is sometimes mentioned in the context of required distributions after a certain age. Sometimes a vested deferred account balance can only be withdrawn as a lump sum. Disability is frequently not mentioned.

K. Old plan provisions and DAT issues.

- *Question:* DB plan only gives a formula valid after a certain date. Our R has worked for several years BEFORE that date. We don't know what the formula was before that date. Do we
  - Classify SPD as uncodable
  - Assume the formula was the same?

*Answer:* we generally assume the formula was valid for all dates. It might be uncodable in certain situations. For instance, if the R quit before the new formula, and the new formula was a result of a merger, there is really no reason to believe the old company the R worked for before the merger had a formula related to the current formula. In that case, throw out the plan.

L. QNEC

- QNEC was a new category we added during this 1999 study. We called it "Qualified non-elective contribution" because each time we saw that, it was a contribution to remedy a top-heavy condition. If you found something called a "qualified non-elective contribution", but after reading the plan, you think it is essentially a profit sharing contribution, code it as a profit-sharing contribution
- What was meant by a QNE was a contribution made only to non-highly-compensated employees that is made to remedy a top-heavy condition in the plan. You need to code a QNE when it is **the only** means to remedy a top-heavy condition in a plan. The other typical way to rectify a top-heavy plan is to have highly paid employees take back some of their tax-deferred savings (in this case, don't code QNEC)
- It is not important that the "employer may designate all (or any portion) of the profit sharing contributions as QNEC." The important discussion is where SPD discusses how a top-heavy condition is rectified.