Version 15.90 – September 2014

We added a new Combined NICC (net interest cost to call) and Weighted Average To-Call (WAC) report to the Stand-Alone Reporting module. This report calculates the net interest cost to call and weighted average to-call for a portfolio of bonds defined by the user. The NICC and WAC are calculated as of a date specified by the user and are calculated individually for each bond and as an average for the portfolio. Note that the calculations are restricted to fixed-rate bonds and for bonds issued on or before the user-specified calculation date.

We have made several data entry improvements to the *file | notes & variable rate bonds | edit/add/delete* menu option. You can press the F6 function key to copy the Tranche identifier to the remaining rows. We now display the record count of transactions of a note/variable rate bond issue in the summary window and in report #1j. We also display various warnings and other information when a user is attempting to merge a fixed rate bond issue with a note/variable rate bond.

We changed reports 11, 105, and 106. In some instances information in these reports was not sorted correctly.

We added new features to the data entry screens for the maturity-by-maturity allocations. These new features facilitate data entry when there are overlapping maturities. We also added new timesaving features to the "remap allocations" menu option.

We added a feature that allows the user to import SLGS from either the current format or the pre-2013 format.

We corrected a bug that occurred when the user requests to re-amortize a negative amortization note. Previously the outstanding principal was not calculated correctly during the negative amortization period.

We added a new column to the Ratings / Rating Agency Summary report (#83d). The new column displays the effective date.

We renamed the *reset dates* button to *define dates* in the reoffering prices/yields grid that is displayed in the Sizing and Refunding modules. This button initiates a pop-up menu that contains four options. The first two options allow the user to reset the call dates and term dates to their default values. These options are useful when there are overlapping maturities. The third and fourth menu options are new. The third option allows a user define a call scenario for a range of maturities. The fourth option allows a user define the maturities that comprise a term bond. Previously the user defined these attributes by entering the call and term dates within the reoffering prices/yields grid. Note: This change is similar to the change that we made to the maturity grid (see interim update 15.75).

We added a new menu option to the *file | database maintenance* submenu. Users can choose the *delete old import/export files* menu option to delete unneeded import/export files. If a user is receiving files from another user via e-mail, we recommend that the user who is receiving the files choose this menu option before saving the new import/export files to his computer. This procedure will ensure that only the most current files are imported to the database.

Spreadsheet Interface - We corrected a bug in the interface that is used to import bond issues and rebate transactions from comma-delimited files. Previously Mun-Ease would only accept transactions with an Issuer Code of 8 characters or less and a Bond Suffix with 3 characters or less. We changed this edit so that the user can import bond containing issuer codes of 10 characters or less and bond suffixes of 4 characters of less.

Important Changes to the Combined Debt Service on an Accrual Basis Report

We have changed the Combined Debt Service on an Accrual Basis report (#76) to correctly calculate the year-end accrual of interest for commercial paper rollovers, lines of credit, draw-down loans, and other debt instruments that have irregular coupon payments.

Background: For most debt instruments, calculating accruals of interest is a relatively simple matter. For example, assume that an issuer's fiscal year starts on January 1 and that a bond issue pays interest semi-annually on April 1 and October 1 of each year. At the end of the fiscal year (December 31), Mun-Ease would record the accrual of 50% of the April 1 interest payment while also reducing the amount of interest in the subsequent fiscal year by a similar amount.

However, if a note pays interest irregularly, Mun-Ease must take additional steps before it can calculate the accrual of interest. It must determine (a) the number of days between the current interest payment and the prior interest payment, (b) the number days in the prior fiscal year (if any), and (c) the number of days in current fiscal year.

Matters are even more complicated if the note is composed of commercial paper rollovers because a typical commercial paper program contains overlapping investments. Mun-Ease cannot just compute the day counts of two adjacent interest transactions because they are not necessarily related. Instead Mun-Ease would need to search through transactions within a note to pair each commercial paper purchase with the related receipt.

The 15.90 release has these capabilities. Note that if you wish to perform interest accruals on an existing note that contains commercial paper rollovers, you must specify that the note contains commercial paper rollovers. You assign this designation through the *file | notes and variable rate transactions | variable rate setup options | existing* menu option. Choose the commercial paper designation in the *optional fields* page. This step is only necessary for commercial paper rollovers that were previously input. Mun-Ease will

automatically define this attribute for all new notes that contain commercial paper rollovers.

We have added new exercises to Chapter 1 in the Tutorials guide. You can install the new version of documentation by running the InstallDoc.Exe file on the CD ROM.

Version 15.75 – February 2014

We updated Mun-Ease to include the 2014 arbitrage computation credits ($1,620). Mun-Ease automatically computes the yearly computation credits when you press the <F11> function key while in the Rebate Transaction grid. The value is determined by the transaction year entered by the user.

We added a new Combined NIC (net interest cost) and Weighted Average Maturity (WAM) report to the Stand-Alone Reporting module. This report calculates the net interest cost and weighted average maturity for a portfolio of bonds defined by the user. The NIC and WAM are calculated as of a date specified by the user and are calculated individually for each bond and as an average for the portfolio. Note that the calculations are restricted to fixed-rate bonds and for bonds issued on or before the user-specified calculation date.

We have revamped the help file that is distributed with the 2012 release of Mun-Ease. Background: We use a third-party tool to create the help file. The help file is in a compiled HTML format and uses our user guide as a source of information. We recently noticed that the help utility was not correctly translating many of the fonts and style templates that we use in the User Guide. Thus we revamped our user guide so that the verbiage would be correctly formatted in the help file.

We have made several changes to the maturity grid that is used to create or edit a bond issue on the database.

(a) When entering the amount of principal for a maturity, the user can press the <F2> function key and Mun-Ease will multiply the amount entered by $1,000. Example: Assume that user is entering a principal amount of $20 million. The user enters the $20 and presses the <F2> function key twice. Mun-Ease changes the amount to $20 million ($20 x 1000 x 1000).

(b) We renamed the "Reset Dates" button to "Define Dates". This button initiates a pop-up menu that contains four options. The first two options allow the user to reset the call dates and term dates to their default values. These options are useful when there are overlapping maturities. The third and fourth menu options are new. The third option allows a user define a call scenario for a range of maturities. The fourth option allows a user define the maturities that comprise a term bond. Previously the user defined these attributes by entering the call and term dates within the maturity grid.

We changed the file | fixed rate bonds | partial calls menu option. This menu option allows you to partially call one or more maturities. Each maturity that the user flags in

this process is split into two pieces: one part that is called and another part that is left uncalled.

In previous versions, Mun-Ease would insert a called maturity directly after a maturity that was flagged to be partially called. It would then renumber all succeeding maturities. This process could be problematic if there were allocations for the bond issue and the user had previously chosen to allocate bond proceeds using the maturity-by-maturity method. Because the maturities are renumbered, they would no longer be linked to the original allocation. With the 15.75 release, we no longer insert the called maturity after the original maturity. Instead, we insert the called maturity at the very bottom of the maturity list. Thus the partial calls menu option will no longer invalidate the links between the Allocations database table and the Maturity database table.

We added a new field to the Maturity database table. This field is called the "previous maturity number." In most cases, the value of this field is zero. However, if a maturity has been split into two parts (one part called and another part uncalled) then the value of this field for the called portion of a maturity contains the original maturity number. The value of this field can be viewed through the file | fixed rate bonds | call and defeasance dates menu option.

We corrected a bug that occasionally occurred when the user pressed the reset dates button while in the maturity grid. The reset dates button allows the user to reset the term dates and called dates back to their default values. In some instances, the values were not reset.

We modified the edit routines in the bond calculator. When calculating the yield on an investment, the prior routines required that the user enter a yield greater than or equal to 0.5%. We lowered this number to 0.006%.

We added a new "Remaining Debt Service by Type of Bond Issue" report (#44d) to the Stand-Alone Reporting module.

We changed the 8038-T tax form. Previously some long text fields in the form were truncated.

We made changes to reports 61 and 67d in the Allocations module and 04G in the Stand-Alone Reporting module. Previously there were instances when fiscal year-end totals for debt service and outstanding debt were not displayed.

We added new edits to the Arbitrage | Yield Tests | Yield-to-Call Test menu option. Mun-Ease will now check all of the call scenarios entered by the user to determine if the user needs to perform this test. If the call scenarios do not meet the test requirements, the user is notified that the test is not necessary.

Version 15.50 – July 2013

Minority Participation Reports - We have added six new minority participation reports. These reports provide statistics of participation of minorities in the bond issuances of the government entity. When setting up the standard lookup codes for underwriters, bond counsels, and financial advisors, the user can designate the code with a minority status: (e. g., African-American, Hispanic, Asian-American, Native-American, Women-Owned, Disabled Veteran or Other). Mun-Ease allows the user to associate an unlimited number of underwriters, bond counsels, and financial advisors with a bond issue.

The user can also define the responsibilities of the agent during the issuance process – for example, bond attorney roles can be defined as "general counsel, disclosure counsel, tax counsel, conduit borrower counsel, underwriter counsel, or other" and underwriter roles can be defined as "lead, co-lead, or syndicate member."

The user also has the option of entering the allotments made to individual syndicate members. If the user enters the syndicate member's allotments, Mun-Ease will compute the total and average takedown for each syndicate member based on the amount of bonds allotted to him. (Allotments are entered for each maturity in the bond issue).

New Debt Service by CUSIP # Report - We have added a new Combined Debt Service by CUSIP # report. This report displays by issuer-obligated and escrowed debt service for each CUSIP. The user can select specific bonds to be included in the report.

New Sizing Features - We added a new input option to the Sizing module. When sizing a bond issue with level debt service, the user can now choose whether the debt service is absolutely level or proportionally level. *Example*: Assume that a bond issue pays interest and principal on a semi-annual basis and that Mun-Ease calculates a level debt service to be $10 million on each debt service payment date. Also assume that stub period is only 90 days (1/2 of the normal number of days in a coupon payment period. If the user chooses the "proportionally level debt service" option, Mun-Ease calculates the debt service to be $5 million in the stub period. If the user chooses the "absolutely level debt service" option, Mun-Ease calculates the debt service to be $10 million in the stub period.

New Allocations Report - We added a new report (#124) to be Allocations module (gross debt service basis). This report displays combined debt service in 5-year increments. It is similar to the report #4e in the Stand-Alone Reporting module.

Computation Credits for 2013 – We updated the Arbitrage module to include the 2013 computation credits ($1,590). Computation credits are automatically calculated for a bond year when you press the F11 function key while in the rebate transaction grid.

General Ledger Charge Codes – The *debt service by paying agent* reports in the Stand-Alone Reporting and Allocations modules display general ledger codes for the interest and principal payable accounts. Previously the account codes were set globally for all bond issues. We have modified Mun-Ease so that these general ledger account codes can be defined for each bond issue.

Build America Bonds Bug Fix – Previously Mun-Ease incorrectly computed the interest subsidy in the stub period when there was accrued interest in the bond issue. This problem is now fixed.

Other - We modified the process to generate 8038 tax forms to reduce the likelihood of encountering an "out-of-memory" error.

We now allow users to create a note with a principal payment occurring on the same date as the issuance date (leases are occasionally structured in this manner).

Version 15.00 – October 2012

New Database for Mun-Ease – Our standard release can use either the SQL Server database from Microsoft or the ElevateDB from Elevate Software. (The ElevateDb database replaces the Borland Database Engine (BDE) that was used in previous versions.) Like SQL Server, the ElevateDB database is a multi-user database that supports database views, stored procedures, and multi-table updates that are processed as a single transaction. It is distributed to our users on a royalty-free basis. We provide a conversion utility that can move data back and forth between the ElevateDB database, the BDE and SQL Server.

New Versions of Our Report Package Feature – Currently our Sizing, Refunding, and Arbitrage modules allow you to create a package of reports that includes a table of contents. The 2012 release has a new feature that allows you to add a cover page for the report package. The cover page can contain bitmaps of your logo and the client's logo. We include logos for all 50 states with the 2012 release.

New Graphics Package – We provide new graphics software with Mun-Ease. Our new graphics package allows users to incorporate gradient fills into each of the 14 standard graphs included with Mun-Ease. The gradient fills can be displayed in individual series, background panels, and/or graph walls. We also provide templates so that users can create professional looking graphs instantly with very little effort. The Sizing and Refunding modules now include options to generate graphs at the conclusion of a calculation.

New Features in Internet Add-On Module – Our Internet Add-On Module allows you to place one or more Mun-Ease databases on a web server so that people outside of your immediate organization can obtain information about your debt. Our 2012 release provides the ability to run this program as either a CGI (Common Gateway Interface) application or one that uses Microsoft's ASP (Active Server Pages) technology.

New GASB 65 Reporting Features – With the exception of "prepaid insurance", GASB 65 requires the issuer to expense upfront issuance costs instead of amortizing those costs over the life of the bond issue. Prior-year financial statements must be restated so that they are consistent with this new rule. We have revised our reports to include information that will facilitate the required restatements under GASB 65.

Other New Reporting Features – We have added a new Escrow Agent Monitor report to help issuers ensure that the escrow agent has made payments on-time and in the correct amount to

bondholders for the issuer's escrowed debt service. We have enhanced the format of all of the reports in the Sizing, Refunding, and Arbitrage modules.