

# GTS Introductory Guide

## Contents

Contents .....	1
What is GTS? .....	3
GTS is a licensed product .....	3
Presentation and Use of GTS Results .....	3
User-provided Hardware and Software Environment .....	3
Microsoft Excel Security Requirements .....	4
Purpose of GTS .....	4
Installing GTS to a Workstation .....	5
Download the GTS Installer .....	5
Run the GTS Installer .....	6
GTS User Input Worksheets .....	7
Starting a GTS Work session: GTS Main window .....	7
GTS Documentation .....	8
GTS Census Worksheet .....	11
GTS Assumptions Worksheet .....	15
GTS Census Subgroups Worksheet .....	16
GTS Test Summary Worksheet .....	18
Saving the Current GTS Data Set .....	19
Open an Existing GTS Data Set .....	21
Other GTS Worksheets .....	23
Test Details Worksheets .....	23
Excel Format Report Worksheets .....	23
Excel Format Charts .....	23
Plan and EE Calculation Consolidation Worksheets .....	23
Request Pdf-format Reports and Charts .....	24

Selecting the Pdf-format Reports and Charts to Prepare .....	24
Selecting the Pdf-format Header Colors .....	25
User-specific Logo for the Pdf-format Cover Page .....	25
Requesting the Selected Pdf-format Reports and Charts.....	26
Print From Excel .....	28
GTS User-distributable Census Collection Worksheet .....	30
Additional Fields and Options on the GTS Main Window .....	31
GTS Archive .....	31
Custom Workbook Template .....	31
About GTS .....	31
GTS Data Input .....	32
Plan Sponsor Deduction Rules .....	32
Communicating the Plan Contribution to the Plan Sponsor .....	32
Limits on the Number of participants .....	33
Maintenance Updates and Customer-requested Enhancements .....	33
GTS Licensing Options.....	33
GTS License Activation .....	37

## What is GTS?

Review the GTS 'tech sheet' [https://www.blazessi.com/TechSheets/GTS\\_TechSheet.pdf](https://www.blazessi.com/TechSheets/GTS_TechSheet.pdf).

## GTS is a licensed product

By installing the GTS product or using its results, the user accepts all provisions of the GTS license and subscription agreement. GTS customers should protect their investment in the GTS system and the proprietary and trade secret information of its developers by following all terms of the GTS license agreement.

## Presentation and Use of GTS Results

Significant effort has been made to make GTS useful, compliant with current statutes and regulations and conforming to the methodology of the industry. However, it is entirely the responsibility of the user to review the illustrated values produced by GTS and to make a judgment as to the suitability of this information for the user's client.

## User-provided Hardware and Software Environment

An appropriate, user-provided hardware and software environment is required for GTS. For proper operation and full functionality of GTS, the user must provide a hardware and software environment which is substantially the same as those used to test GTS.

GTS is tested using the recent versions of the Microsoft Windows operating system, e.g. Windows 10 or 11 Professional and the Microsoft .Net Framework 7.0.0. The current version of GTS has a limited dependency on Microsoft Excel only for the 'Print from Excel' function of the product.

The Microsoft .Net Framework 7.0.0 is available at no cost at: <https://dotnet.microsoft.com/en-us/download/dotnet/7.0>.

From time-to-time Microsoft and other vendors establish sunset dates for hardware and software. After such a sunset date is past, GTS is no longer tested on those obsolete hardware or software platforms.

The Microsoft Windows operating system incorporates many features which are user-controlled, so the appearance of the GTS user interface may differ from that presented in this document.

GTS produces pdf-format reports and charts and portions of the GTS documentation are available as pdf-format documents. The recommended viewer for pdf-format documents in Microsoft Windows 10 is the Microsoft Edge browser or the Google Chrome browser.

## Microsoft Excel Security Requirements

The GTS developers employ up-to-date 'malware' identification software for all GTS components. GTS users should also use similar procedures to assure a secure computing environment. These measures are especially important when sharing files or workstations with other users of GTS.

Since the current version of GTS has only a limited dependency on Microsoft Excel when exporting GTS information to Excel workbooks, the Microsoft security limitations on Excel 'macros' or web services does not apply to GTS.

## Purpose of GTS

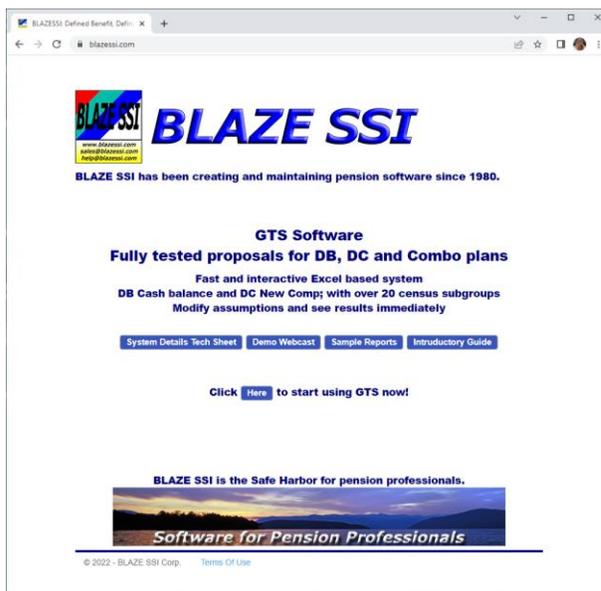
GTS is a tool to design and illustrate IRC401(a)-qualified defined benefit and defined contribution profit-sharing retirement plans, which are subject to non-discrimination testing. It can be used for 'What if?' studies of existing plans or for proposed plans not yet in effect. GTS is not intended to be a replacement for a qualified plan annual administration or valuation system or to produce the required annual deposit ("cost") of a defined benefit plan, which can only be obtained by an actuary in accordance with IRS430 funding rules.

## Installing GTS to a Workstation

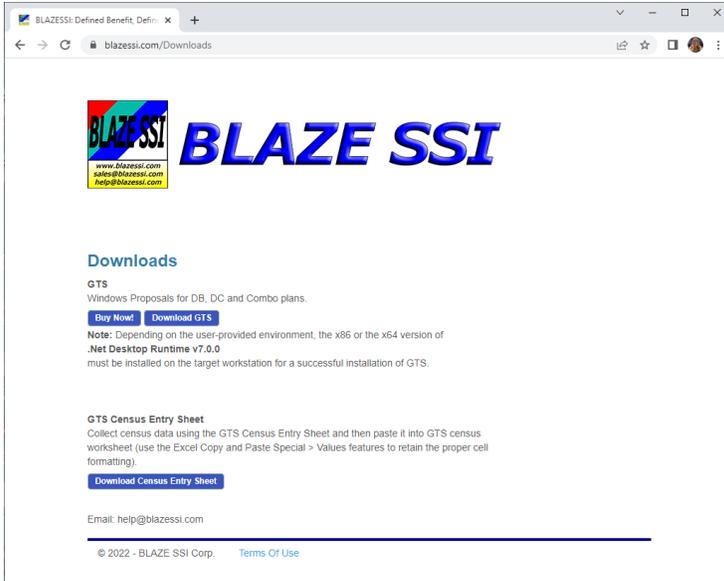
### Download the GTS Installer

If you have not yet licensed GTS, please refer to the 'GTS Licensing Options' section of this document for details on licensing and activation.

Use a web browser to navigate to <https://www.blazessi.com> and at the BLAZE SSI home page click the 'Click Here to start using GTS now!' link.



Click on the 'Download GTS' button to download the latest GTS installer (GtsCs\_90ccmdd.msi) to the desired location on the workstation.



## Run the GTS Installer

Browse to the location of the GTS installer on the workstation, double [left] click the installer file and follow the installer prompts.

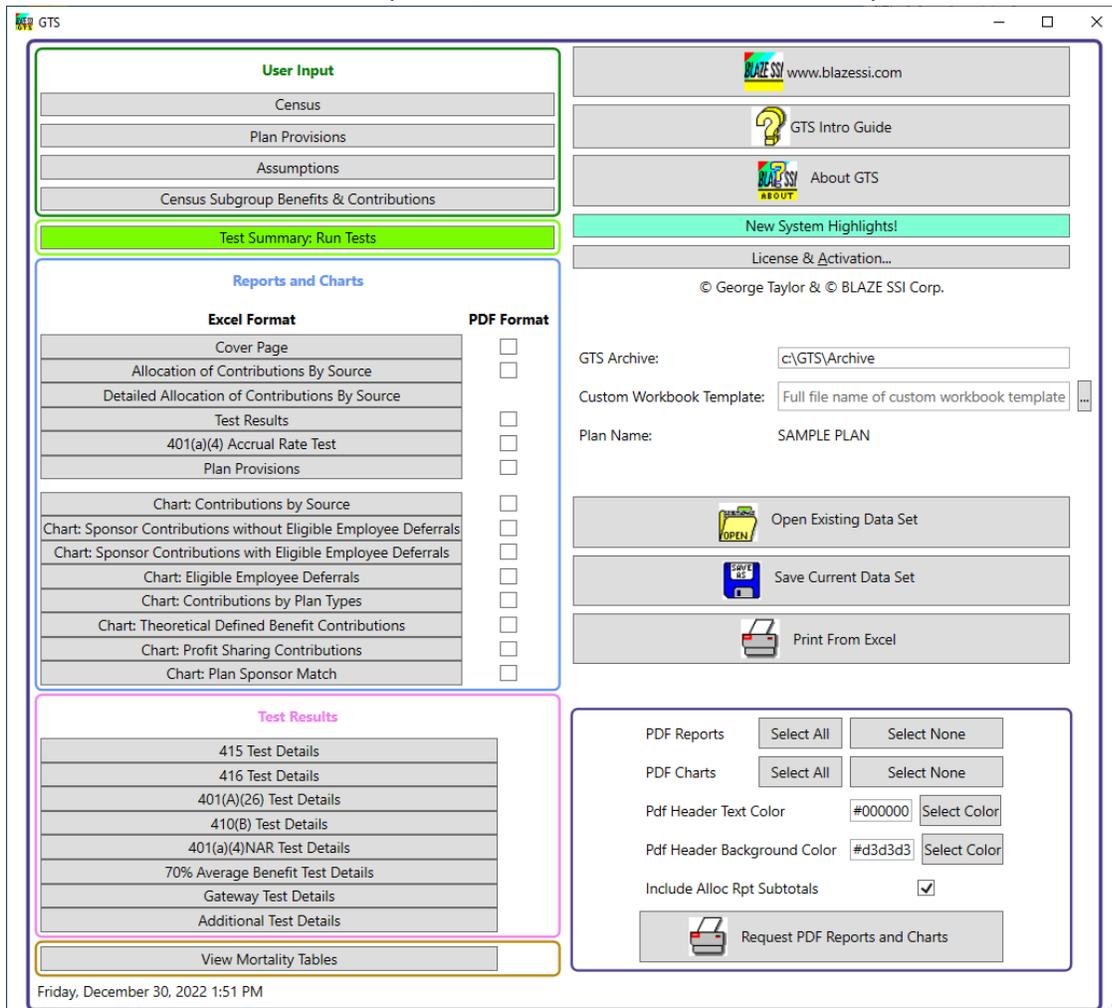
# GTS User Input Worksheets

## Starting a GTS Work session: GTS Main window

Double [left] click the BLAZE SSI Applications > GTS system shortcut from the Window applications menu.

If this is the first time you are starting GTS after purchasing or updating a license, please see the 'GTS Licensing Options' section of this document for details on activation.

Once activation of GTS is completed, the GTS main window will be presented:



The first time a GTS work session is started on a workstation, use the 'window grip' on the lower right corner of the window to adjust the window size appropriately. The GTS system will record the user-selected size and position of the GTS system windows for all subsequent GTS work sessions on the workstation.

Whenever a GTS work session is started on a workstation, the GTS default data set will be will be the current GTS data set.

Once a GTS worksheet has been presented by clicking one of the applicable buttons on the left of the GTS main window, the other GTS worksheets may be presented without returning to the GTS main window. Do this by clicking the tabs on the bottom of the GTS worksheet window or for the user-input worksheets clicking the buttons on the left of the 'GTS Worksheet' window.

To return to the GTS main window, click the 'close X' in the upper right corner of the GTS worksheet window, or select the 'Main Window' button on the left of the 'GTS Worksheet' window.

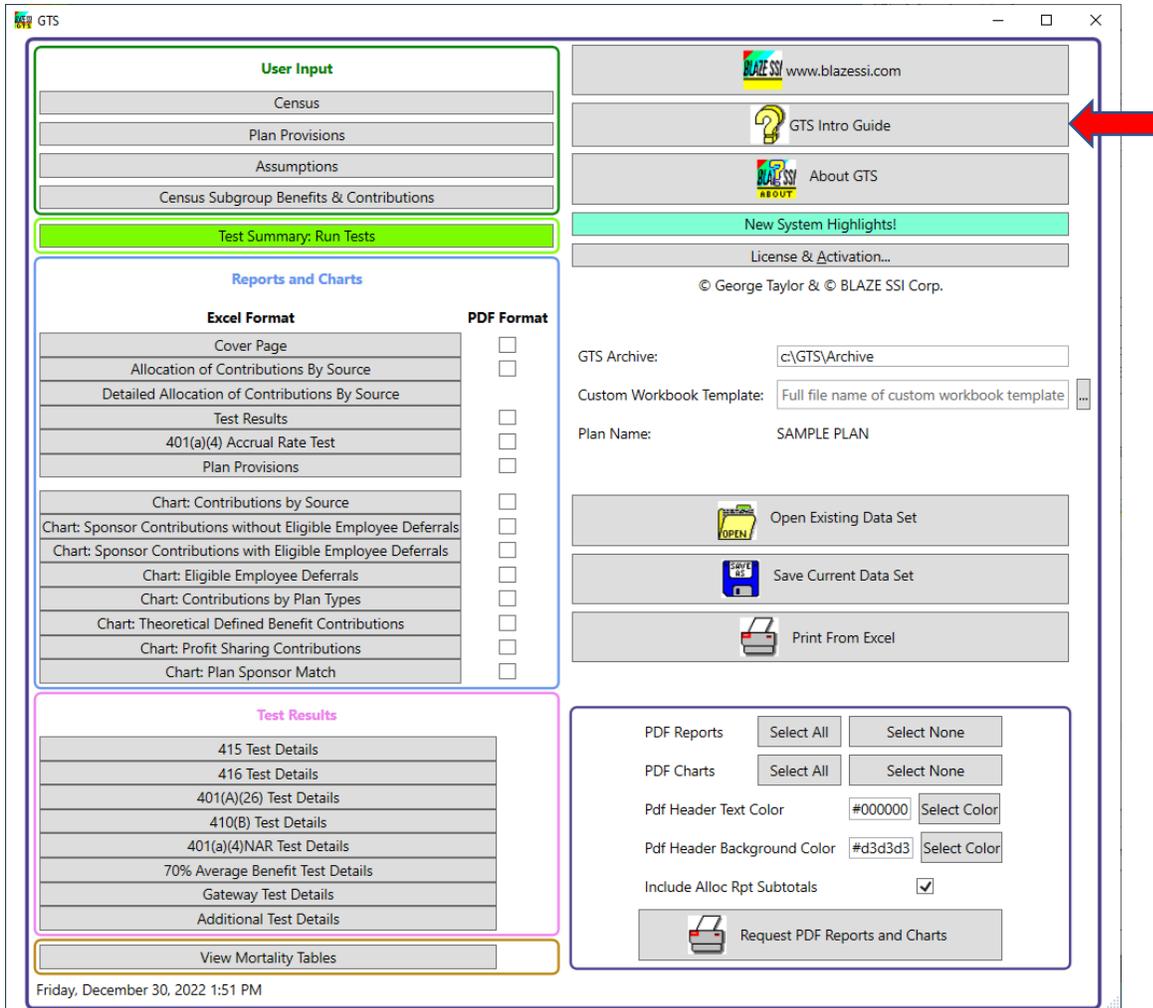
The screenshot displays the GTS software interface. On the left is a sidebar with buttons: 'Census', 'Assumptions', 'Plan Provisions', 'Census Subgroups', 'Test Summary' (highlighted), 'Save Current Data Set', and 'Main Window'. A red arrow points to the 'Main Window' button. The main area shows a spreadsheet with columns A, B, C, and D. The table contains the following data:

	A	B	C	D
1		Plan Provision Description	User-entered DB Value	DO NOT SHOW DC PLAN SPECS
2		Plan Effective Date	January 1, 2015	January 1, 2015
3		DC Plan Type	N/A	Non 401(K) DC plan
4	21	Plan Participation Eligibility: Minimum Age		21
5	12	Plan Participation Eligibility: Minimum Months of Service		12
6		Plan Participation Eligibility: Plan Entry Date	1st Day of Plan Year Nearest	1st Day of Plan Year Nearest
7		DC Employer allocation method	N/A	Rate Group allocation
8	65	Normal Retirement: Age		65
9	0	Normal Retirement: Minimum Years of Employment Service		0
10	5	Normal Retirement: Minimum Years of Plan Participation		5
11		Normal Retirement: Timing	1st Day of Month Following	1st Day of Month Following
12				
13		Vesting Schedule	3-Year Cliff [100% after 3 years]	3-Year Cliff [100% after 3 years]
14				
15	1	Pre-retirement Death Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]		
16				
17	1	Accrued Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]		
18				
19	1	Plan is a Pre-existing Plan		
20	1	Pre-existing Plan was Topheavy		
21	0	IRC416: Topheavy Benefit Requirement Satisfied by Another Plan		0
22	5.00%	IRC416: Topheavy Plan: Min. DC AcctAddn as %Pay		
23	0.00%	IRC416: Topheavy Plan: Min. DB RetBen Accrual as %Pay		0.00
24	1	IRC416: Use Matching 401(m) Cont. to satisfy Topheavy Requirements		
25				0.00
26	0.00%	Non-Elective Contribution (indicate amount)		

At the bottom of the window, there are navigation tabs: 'Census', 'Plan\_Provisions', 'Assumptions', 'Census\_Subgroups', 'Test\_Summary', 'RCover', 'RAlloc', 'RAllocDet', 'RTestSum', 'R401(a)(4)', and 'RProv'. Below the tabs are controls for 'AutoSum', 'AutoCount', 'Tabs Width', and 'Zoom' (set to 100%). A red arrow points to the window's close button (X) in the top right corner.

## GTS Documentation

The latest version of the 'GTS Introductory Guide', this document, may be obtained by single [left] clicking the 'GTS Intro Guide' button on the right side of the GTS main window.



All user input fields in the GTS system have ‘cell comments’ within the applicable worksheet. Hover the cursor over or single [left] click the ‘red triangle’ in the upper right corner of the cell associated with the input field to view the documentation in a ‘comment’ format. For the GTS ‘Census’ and ‘Census\_Subgroups’ worksheets the comments are found in the column heading cells. For the ‘Assumptions’ and ‘Plan Provisions’ worksheets the comments are found in the cells to the left of the input cells.

Census	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	
1	Plan Name: SAMPLE PLAN																					
2	User Input Census Values (gray headings)																					
3	There should be 100 employees in this plan. If you have more or less, please adjust the number of employees in the 'Test Summary' worksheet.																					
4	Apply entries																					
5	Save Current Data Set																					
6	Main Window																					
7	Soc/Sec# or EE (PH)	First Name	Last Name	Date of Birth	Date of Hire	Plan Compensation	HCE	KEY	EE Elective Compensation	Sponsor w/o Catch-Up	Contribution	Census Subgroup #	IRCA15	High 3-Year DB Act. Bal	IRCA15 DB	IRCA16	IRCA401(a)(2)	IRCA401(b)	IRCA401(a)(4)	NAR/MAR	Gateway Exclude EE	
8		1.1	1	1/1/1970	1/1/2000	\$305,000.00	1	1	20500.00	0.00	0.00	1	99	0	0	0	0	0	0	0	0	0
9		2.2	2	1/1/1970	1/1/2000	\$200,000.00	1	0	20500.00	0.00	0.00	1	99	0	0	0	0	0	0	0	0	0
10		3.3	3	1/1/1970	1/1/2000	\$50,000.00	0	0	5000.00	0.00	0.00	0	99	0	0	0	0	0	0	0	0	0
11													99	0	0	0	0	0	0	0	0	0
12													99	0	0	0	0	0	0	0	0	0
13													99	0	0	0	0	0	0	0	0	0
14													99	0	0	0	0	0	0	0	0	0
15													99	0	0	0	0	0	0	0	0	0
16													99	0	0	0	0	0	0	0	0	0
17													99	0	0	0	0	0	0	0	0	0
18													99	0	0	0	0	0	0	0	0	0
19													99	0	0	0	0	0	0	0	0	0
20													99	0	0	0	0	0	0	0	0	0
21													99	0	0	0	0	0	0	0	0	0
22													99	0	0	0	0	0	0	0	0	0
23													99	0	0	0	0	0	0	0	0	0
24													99	0	0	0	0	0	0	0	0	0
25													99	0	0	0	0	0	0	0	0	0
26													99	0	0	0	0	0	0	0	0	0
27													99	0	0	0	0	0	0	0	0	0
28													99	0	0	0	0	0	0	0	0	0

Census	A	B	C	D
1	Plan Provision Description	User-entered DB Value	DO NOT SHOW DC PLAN SPECS	
2	Plan Effective Date	January 1, 2015	January 1, 2015	
3	DC Plan Type	N/A	Non 401(K) DC plan	
4	Plan Participation Eligibility: Minimum Age	21	21	
5	Plan Participation Eligibility: Minimum Months of Service	12	12	
6	Plan Participation Eligibility: Plan Entry Date	1st Day of Plan Year Nearest	1st Day of Plan Year Nearest	
7	DC Employer allocation method	N/A	Rate Group allocation	
8	Normal Retirement: Age	65	65	
9	Normal Retirement: Minimum Years of Employment Service	0	0	
10	Normal Retirement: Minimum Years of Plan Participation	5	5	
11	Normal Retirement: Timing	1st Day of Month Following	1st Day of Month Following	
12				
13	Vesting Schedule	3-Year Cliff (100% after 3 years)	3-Year Cliff (100% after 3 years)	
14				
15	Pre-retirement Death Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]	1		
16		Enter 0/No 1/Yes		
17	Accrued Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]	1		
18				
19	Plan is a Pre-existing Plan	1		
20	Pre-existing Plan was Topheavy	1		
21	IRC416: Topheavy Benefit Requirement Satisfied by Another Plan	0	0	
22	IRC416: Topheavy Plan: Min. DC AcctAddn as %Pay	5.00%		
23	IRC416: Topheavy Plan: Min. DB RetBen Accrual as %Pay	0.00%	0.00	
24	IRC416: Use Matching 401(m) Conl. to satisfy Topheavy Requirements	1		
25			0.00	
26	Non-Elective Contribution (indicate amount)	0.00%		

The GTS system provides special messages depending on the user input. For example on the 'Census Subgroups' worksheet, a reminder to run the 'Test Summary' worksheet is provided at the top of the 'Census Subgroups' worksheet.

Census Subgroup #	Defined Benefit Plan Retirement Benefit	Defined Cont. Plan Sponsor's Contribution	Defined Benefit Plan Type	Criteria Description	Greater of CB Cont. or DB benefit	Defined Benefit Plan Group Total
0	0.00000	-5.00000	CB		0.00 N/A	\$7,500
1	0.00000	-5.00000	CB		0.00 N/A	\$66,250
2	0.00000	0.00000	CB		0.00 N/A	\$0
3	0.00000	0.00000	CB		0.00 N/A	\$0
4	0.00000	0.00000	CB		0.00 N/A	\$0
5	0.00000	0.00000	CB		0.00 N/A	\$0
6	0.00000	0.00000	CB		0.00 N/A	\$0
7	0.00000	0.00000	CB		0.00 N/A	\$0
8	0.00000	0.00000	CB		0.00 N/A	\$0
9	0.00000	0.00000	CB		0.00 N/A	\$0
10	0.00000	0.00000	CB		0.00 N/A	\$0
11	0.00000	0.00000	CB		0.00 N/A	\$0
12	0.00000	0.00000	CB		0.00 N/A	\$0
13	0.00000	0.00000	CB		0.00 N/A	\$0
14	0.00000	0.00000	CB		0.00 N/A	\$0
15	0.00000	0.00000	CB		0.00 N/A	\$0
16	0.00000	0.00000	CB		0.00 N/A	\$0
17	0.00000	0.00000	CB		0.00 N/A	\$0
18	0.00000	0.00000	CB		0.00 N/A	\$0
19	0.00000	0.00000	CB		0.00 N/A	\$0
20	0.00000	0.00000	CB		0.00 N/A	\$0
21	0.00000	0.00000	CB		0.00 N/A	\$0
22	0.00000	0.00000	CB		0.00 N/A	\$0
23	0.00000	0.00000	CB		0.00 N/A	\$0
24	0.00000	0.00000	CB		0.00 N/A	\$0
25	0.00000	0.00000	CB		0.00 N/A	\$0

### GTS Census Worksheet

Single [left] click the 'Census' button on the left side of the GTS main window to present this census worksheet.

SocSec# or EE ID#	First Name	Last Name	Date of Birth	Date of Hire	Plan Compensation	HCE	KEY	EE Elective Compensation w/o Catch-Up	Sponsor Match Contribution	Census Subgroup #	IRC415 Exclude From Test	High 3-Year Average Compensation	IRC415 DB Acct. Bal. as of 12/31/23
N/A			1/1/1970	1/1/2000	\$555,000.00	1	1	\$46,000.00	\$0.00	1	0	\$0.00	\$0.00
1 1	1		1/1/1970	1/1/2000	\$305,000.00	1	1	20500.00	0.00	1	0	0	0
2 2	2		1/1/1970	1/1/2000	\$200,000.00	1	0	20500.00	0.00	1	0	0	0
3 3	3		1/1/1970	1/1/2000	\$50,000.00	0	0	5000.00	0.00	99	0	0	0

- Enter the required data as a separate row of cells for each member of the census to be considered in the plan.
- Do not leave empty rows between members of the census as GTS considers only those employee records in the census which are 'contiguous'.
- The 'EId' field value must be unique for all members of a specific GTS data set.
- Enter '99' for the value of the 'Census Subgroup #' field for an employee ineligible to participate in the plan.
- The first employee in the census must be a valid and participating employee, meaning they must have a minimum amount of compensation, cannot be coded in Census Subgroup #99, and cannot be excluded from any of the tests.
- Census data may be manually-entered or copy/pasted from another source. When pasting always use 'Paste Special > Values' from the context menu presented by single [right] clicking the start of the target paste range in the worksheet. Failure to use 'Paste Special > Values' may destroy the GTS validation or formula for the affected cells and render GTS inoperative.
- Scroll or tab to view and enter all the cells in a row of employee data fields.
- Some fields may be left empty, but most require a non-blank entry. Refer to the 'comment' documentation for details.
- Do not delete employees because doing so may corrupt GTS formula and validation components. Instead use census subgroup #99 to indicate their ineligible status.
- Sorting employees on the census sheet may also corrupt GTS formula and validation components. Instead, use the [GTS User-distributable Census Collection Worksheet](#) to perform any sorting prior to doing a copy and paste [Paste Special > Values] to the GTS Census worksheet.

## GTS Plan Provisions Worksheet

Single [left] click the 'Plan Provisions' button on the left side of the GTS main window to present this worksheet.

	A	B	C	D
1		<b>Plan Provision Description</b>	<b>User-entered DB Value</b>	<b>DO NOT SHOW DC PLAN SPECS</b>
2		Plan Effective Date	January 1, 2015	January 1, 2015
3		DC Plan Type	N/A	Non 401(K) DC plan
4		Plan Participation Eligibility: Minimum Age	21	21
5		Plan Participation Eligibility: Minimum Months of Service	12	12
6		Plan Participation Eligibility: Plan Entry Date	1st Day of Plan Year Nearest	1st Day of Plan Year Nearest
7		DC Employer allocation method	N/A	Rate Group allocation
8		Normal Retirement: Age	65	65
9		Normal Retirement: Minimum Years of Employment Service	0	0
10		Normal Retirement: Minimum Years of Plan Participation	5	5
11		Normal Retirement: Timing	1st Day of Month Following	1st Day of Month Following
12				
13		Vesting Schedule	3-Year Cliff [100% after 3 years]	3-Year Cliff [100% after 3 years]
14				
15		Pre-retirement Death Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]	1	
16				
17		Accrued Benefit: [DB Plan: PVAB] [DC Plan: AcctBal]	1	
18				
19		Plan is a Pre-existing Plan	1	
20		Pre-existing Plan was Topheavy	1	
21		IRC416: Topheavy Benefit Requirement Satisfied by Another Plan	0	0
22		IRC416: Topheavy Plan: Min. DC AcctAddn as %Pay	5.00%	
23		IRC416: Topheavy Plan: Min. DB RetBen Accrual as %Pay	0.00%	0.00
24		IRC416: Use Matching 401(m) Cont. to satisfy Topheavy Requirements	1	
25				0.00
26		Non-Elective Contribution (indicate amount)	0.00%	

Entries on this worksheet are cosmetic (meaning they only impact the reports and not the calculations) with the following exceptions:

- Normal Retirement Age (C8): This value is also displayed on the Assumptions worksheet (C10) and is used when performing the 401(a)(26) test. It is also used in the calculation of the 415 DB limit, if earlier than cell C8 of the Assumption sheet.
- Plan is a Pre-existing Plan (C19) and IRC416: Use Matching 401(m) Cont. to satisfy Topheavy Requirements (C24): These values control the minimum top heavy information relative to all plans being tested. If there is no pre-existing plan, the system will then determine if the plan/plans are top-heavy for testing purposes.
- Non-Elective Contribution (C26): This value will change the format of the reports that illustrate contributions by source, determining whether columns are labeled 'Non-Elective Contribution' or 'Matching Contribution'.

- Prepared For: Plan Name/Description (C30): This value will be displayed in the 'Plan Name' field on the Main Window to remind the user which GTS data set they are working on.
- Prepared For/Prepared By/Display (C30-C44): These values control what is included on the Cover Page as well as the headings of other reports.

## GTS Assumptions Worksheet

Single [left] click the 'Assumptions' button on the left side of the GTS main window to present this worksheet.

Census	A	B	C	D
Assumptions	1	<b>Assumption Description</b>	<b>User-entered Value</b>	<b>Required Input Indicator</b>
Plan Provisions	2	Valuation Date/ Testing Date	December 31, 2023	Input Required
Census Subgroups	3			
Test Summary	4	IRC415: Maximum Benefit: Interest % for determining the maximum lump sum	5.50%	Input Required
Save Current Data Set	5	IRC415: Maximum Benefit: Apply Mortality Pre-Age 62	1	Input Required
Main Window	6	IRC415: Maximum Benefit Apply Mortality Post-Age 65	0	Input Required
	7			
	8	IRC401(a): Non-discrimination Tests: Testing Age	65	Input Required; has override
	9	Earliest Retirement Date	January 1, 2028	Input Required; has override
	10	IRC401(a)(26) Testing Age:	65	From Plan Provisions
	11	Apply Imputed Disparity to Rate Group Factors	No	Input Required
	12			
	13	Defined Benefit Plan: PBGC Requirements Apply	1	Input Required
	14			
	15	DC Plan: Mortality Table	UP84 UNISEX	Input Required
	16	DC Plan: Retirement Interest%	8.50%	Input Required
	17	DC Plan: Pre-retirement Interest%	8.50%	Input Required
	18	DB Plan: Mortality Table	2023 417(e) table	Input Required
	19	DB Plan: Retirement Interest% (Act. Eq. or crediting rate if CB plan)	5.00%	Input Required
	20	DB Plan: Pre-Retirement Interest% (Act. Eq. or crediting rate if CB plan)	5.00%	Input Required
	21			
	22	401(a)(4): Plans to Test	DB & DC	Input Required
	23	401(a)(4): Test Basis	Benefits	Input Required; has override.
	24	401(a)(4): Test Period	Current	Input Required; has override.
	25	401(a)(4): Testing Service Definition	Employment	N/A
	26	401(a)(4): Maximum Past Service credit prior to Valuation Date	99	N/A
	27			
	28	IRC401(a)(26): Maximum Compensation Considered	\$330,000	Input Not Required (but may be entered)

Refer to the 'cell comments' by hovering over or single [left] clicking the 'red triangle' in the upper right corner of the cells to the left of the input cells for details on coding the Assumptions.

## GTS Census Subgroups Worksheet

Single [left] click the 'Census Subgroups' button on the left side of the GTS main window to present the 'Census Subgroups' worksheet.

Census Subgroup #	Defined Benefit Plan Retirement Benefit	Defined Cont. Plan Sponsor's Contribution	Defined Benefit Plan	Greater of CB Cont. or DB benefit	Defined Benefit Plan TOTAL Group
0	0.00000	-5.00000	CB	0.00	\$7,500
1	0.00000	-5.00000	CB	0.00	\$66,250
2	0.00000	0.00000	CB	0.00	\$0
3	0.00000	0.00000	CB	0.00	\$0
4	0.00000	0.00000	CB	0.00	\$0
5	0.00000	0.00000	CB	0.00	\$0
6	0.00000	0.00000	CB	0.00	\$0
7	0.00000	0.00000	CB	0.00	\$0
8	0.00000	0.00000	CB	0.00	\$0
9	0.00000	0.00000	CB	0.00	\$0
10	0.00000	0.00000	CB	0.00	\$0
11	0.00000	0.00000	CB	0.00	\$0
12	0.00000	0.00000	CB	0.00	\$0
13	0.00000	0.00000	CB	0.00	\$0
14	0.00000	0.00000	CB	0.00	\$0
15	0.00000	0.00000	CB	0.00	\$0
16	0.00000	0.00000	CB	0.00	\$0
17	0.00000	0.00000	CB	0.00	\$0
18	0.00000	0.00000	CB	0.00	\$0
19	0.00000	0.00000	CB	0.00	\$0
20	0.00000	0.00000	CB	0.00	\$0
21	0.00000	0.00000	CB	0.00	\$0
22	0.00000	0.00000	CB	0.00	\$0
23	0.00000	0.00000	CB	0.00	\$0
24	0.00000	0.00000	CB	0.00	\$0
25	0.00000	0.00000	CB	0.00	\$0

- Enter the required data as a separate row of cells for each census subgroup to be considered in the plan.
- Do not leave empty rows between census subgroup rows as GTS considers only those census subgroup records which are 'contiguous'.
- The 'Census Subgroup#' field value must be unique among all census subgroups. It is best to leave the 'Census Subgroup#' field values as consecutive integers.
- Special census subgroup number, 99..., should occur consecutively at the end of the list of census subgroup numbers.
- Special census subgroup number 100 indicates that employees in this subgroup will be excluded from all tests except the 70% Average Benefits test, which is part of the 401(a)(4) non-discrimination test when cross testing on a benefit basis. An employee in this subgroup will be considered a plan participant and may receive a benefit or contribution under the plan.

- Special census subgroup number 103 indicates that the Minimum Top Heavy Percent (MTH%) for this census subgroup will be a 3% profit sharing contribution despite what is user entered on the Plan Provisions worksheet. This entry may be useful when there are non-Key employees who do not benefit in the DB plan and therefore their MTH% may be reduced from 5% to 3%.
- Scroll or tab to view and enter all the cells in a row of census subgroup data fields.

Generally the highly-compensated employees (HCEEs) are members of a subgroup which is different than the other members of the census. Using iterative processing, by running the 'Test Summary' > Run Tests option, the GTS user can develop a plan design which will maximize the benefits and contributions for the preferred group and minimize those benefits and contributions for the other members of the census.

## GTS Test Summary Worksheet

Single [left] click the 'Test Summary' button on the left of the GTS main window to present the 'Test Summary' worksheet.

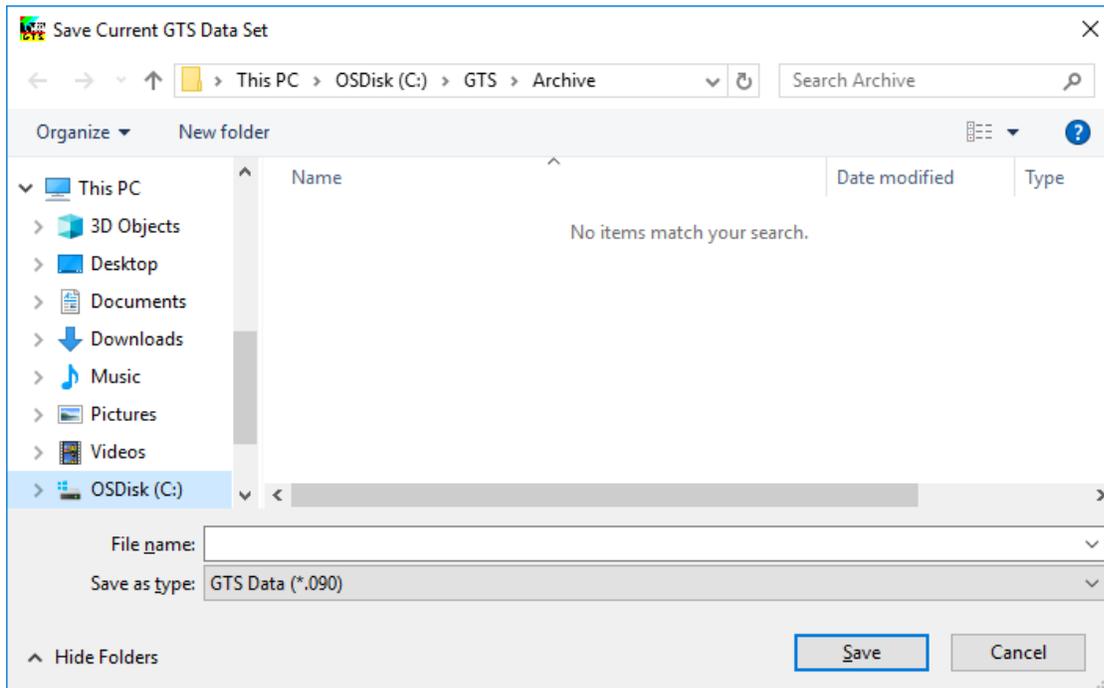
There is no user input required on the 'Test Summary' worksheet other than clicking the 'Run Tests' button. Clicking this button will update the test results illustrated on this worksheet. In some cases GTS special messages will be presented suggesting tests to correct which have failed due to the user-entered value in the current GTS data set.

Row	Test Name	Result	HC Employees	Other Employees	All Employees
7	IRC401(a)(4) Test Result Summary	<b>ALL A(4) TESTS PASS</b>			
8	401(A)(26) TEST	NO DB CONTRIB: 401(A)(26) MAY FAIL			Total Plan Sponsor Contributions (without Employee-elective Deferrals)
9	IRC 415 LIMITATION TEST	PASS LEVEL CONT. TO RET.	\$25,250.00		
10	410(B) TEST	PASS		\$2,500.00	
11	410(B) RATIO BENEFITS TEST RESULTS	PASS			\$27,750.00
12	410(B) AVERAGE BENEFITS TEST	N/A			% to HC Employees 90.99%
13	401(A)(4) AVERAGE BENEFITS TEST:				% to Other Employees 9.01%
14	401(A)(4) TESTING FOR NAR/MVAR: AVG. BENEFITS TEST	N/A ALL RATE GROUPS PASS RATIO TEST			
15	NAR & MVAR TEST	PASS			Total Employee-elective Deferrals
16	DC PLAN GATEWAY TEST IF USING RATE GROUPS:	PASS	\$41,000.00		
17	SPECIAL GATEWAY RULES UNDER 1.401(a)(4)-9(b)(2)(v)	N/A	\$5,000.00		
18	<small>The defined benefit maximum deduction is an estimate. A valuation by the plan's enrolled actuary is required for the actual value!</small>				All Employees \$46,000.00
19	IRC404 Maximum Deductible Contribution	Defined Benefit amounts reflect benefits being tested.			% to HC Employees 89.13%
20	Estimated Defined Benefit Contribution	\$0.00			% to Other Employees 10.87%
21	Estimated Defined Contribution Account Addition	\$27,750.00			
22	6% Compensation for Defined Contribution Plan Participants	\$33,300.00			Total Contribution (with Employee-elective Deferrals)
23	25% Compensation for Defined Benefit Plan Participants	\$0.00	\$66,250.00		
24	25% Compensation for Defined Contribution Plan Participants	\$138,750.00		\$7,500.00	
25	Estimated Total Plan Sponsor Contribution	\$27,750.00		\$73,750.00	
26	Estimated IRC404 Maximum Deductible Contribution	\$138,750.00			% to HC Employees 89.83%
27	IRC404 Maximum Deductible Contribution Limit Test	PASS			% to Other Employees 10.17%

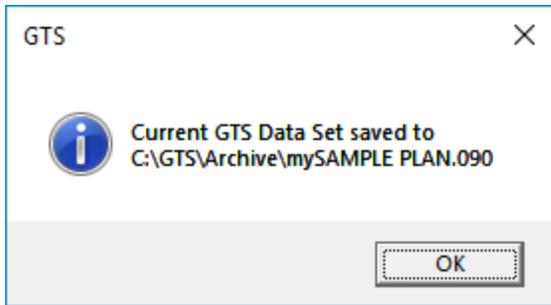
## Saving the Current GTS Data Set

After closing out the worksheet window by either selecting the 'Main Window' button on the left, or clicking the 'X' in the upper right corner, single [left] click the 'Save Current Data Set' button on the right side of the GTS main window.

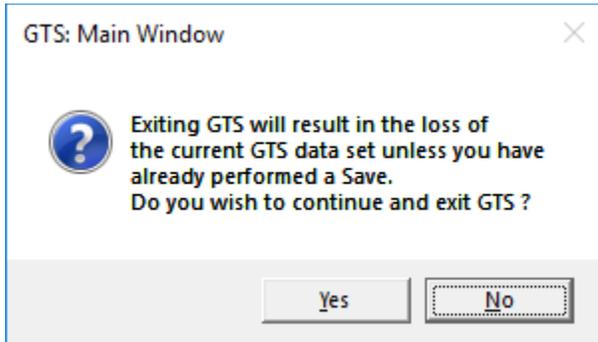
The GTS 'Save Current GTS Data Set' dialog will be presented.



- Each GTS data set is saved in a separate xml-format file with the file extension '.090'.
- Browse to the desired location for this GTS data set. The default folder for GTS data sets is 'C:\GTS\Archive'. The user can change this using the 'GTS Archive' field on the Main Window.
- Enter the desired file name for this GTS data set.
- Click the 'Save' button.
- If the save operation is successful a message box will be presented indicating the location of the saved GTS data set.



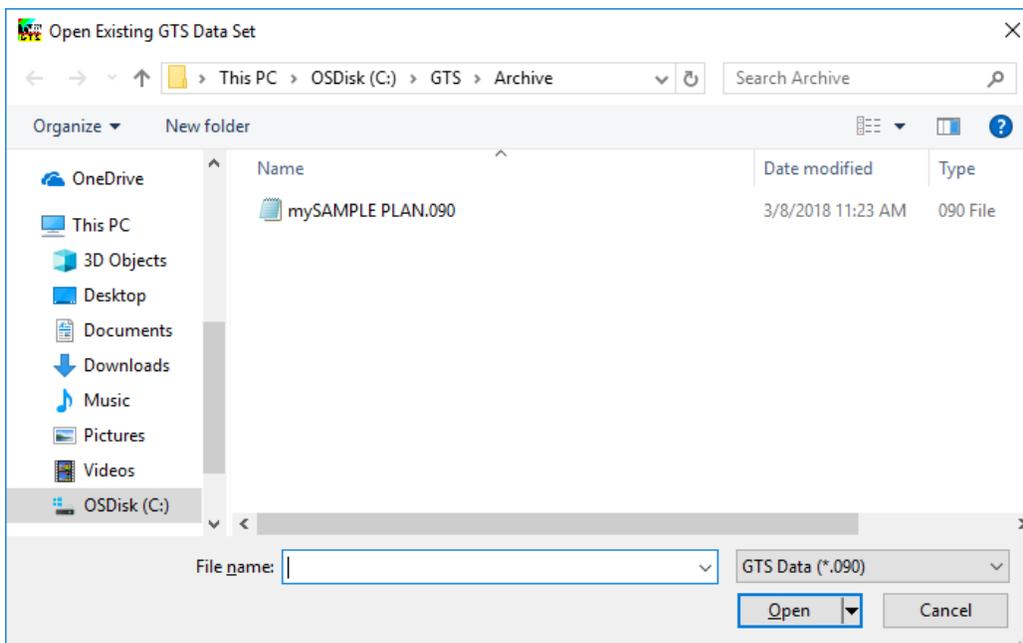
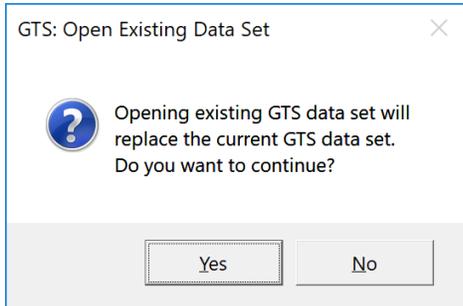
If the user exits GTS without saving the data set they have been working on, all data will be lost. A warning message will be given when the user attempts to close GTS to remind them to save their data prior to exiting.



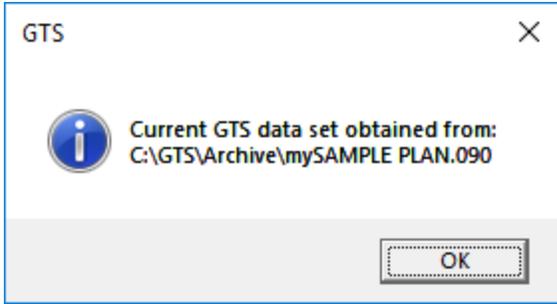
## Open an Existing GTS Data Set

Single [left] click the 'Open Existing Data Set' button on the right side of the GTS main window to present the 'Open Existing GTS Data Set' dialog.

Before the 'Open Existing GTS Data Set' dialog is presented a warning dialog is presented. If the current GTS data set is not to be saved or has already been saved, single [left] click the 'Yes' button.



- Browse to the location of the pre-existing GTS data set.
- Select the applicable file name from the available file names.
- Single [left] click the 'Open' button.
- If the selected GTS data set has successfully been opened and replaced the current GTS data set, a message box will be presented.



## Other GTS Worksheets

### Test Details Worksheets

The 'Misc\_Calcs1', 'Misc\_Calcs2', 'MortTabs', '415', '416', '401(A)(26)', '401(A)(4)NAR', '410(B)', and '70%\_Avg\_Ben' worksheets provide details of the GTS test results. There are no user input fields on these worksheets.

The information available on these test details worksheets is useful to verify the GTS test results and to indicate corrective measures when a test fails due to the user-entered information in the current GTS data set.

### Excel Format Report Worksheets

The 'RCover', 'RAlloc', 'RAllocDet', 'RTestSum', 'R401(a)(4)', and 'RProv' are Excel-format reports which may be viewed by using the applicable buttons in the 'Reports and Charts' section on the left side of the GTS main window. There are no user input fields on these worksheets.

To print these Excel format report worksheets, use the 'Print From Excel' function available on the right side of the GTS main window.

### Excel Format Charts

The 'CSponsContrNoDef', 'CSponsContrWDef', 'CEEDef', 'CContrByPlan', 'CContrBySrc', 'CTheoDBContr', 'CPSContr', and 'CSponsMatch' charts are 2-D Excel format charts which may be viewed using the applicable buttons in the 'Reports and Charts' section on the left side of the GTS main window. There are no user input fields on these worksheets.

To print these Excel format charts in 3-D, use the 'Print From Excel' function available on the right side of the GTS main window.

### Plan and EE Calculation Consolidation Worksheets

The 'EECalc' and 'PlanCalcs' worksheets contain information consolidated from other GTS worksheets. There are no user input fields on these worksheets. The information on these worksheets is used by GTS when the 'Request PDF Reports and Charts' function is used.

## Request Pdf-format Reports and Charts

GTS will generate pdf-format reports and charts based on the current GTS data set and testing results.

### Selecting the Pdf-format Reports and Charts to Prepare

Select the PDF format reports and charts to include in the generated pdf-format file by checking the applicable items on the left side of the GTS main window. All or no pdf reports or all or no pdf charts may be selected by clicking the applicable 'Select All' or 'Select None' buttons on the right side of the GTS main window.

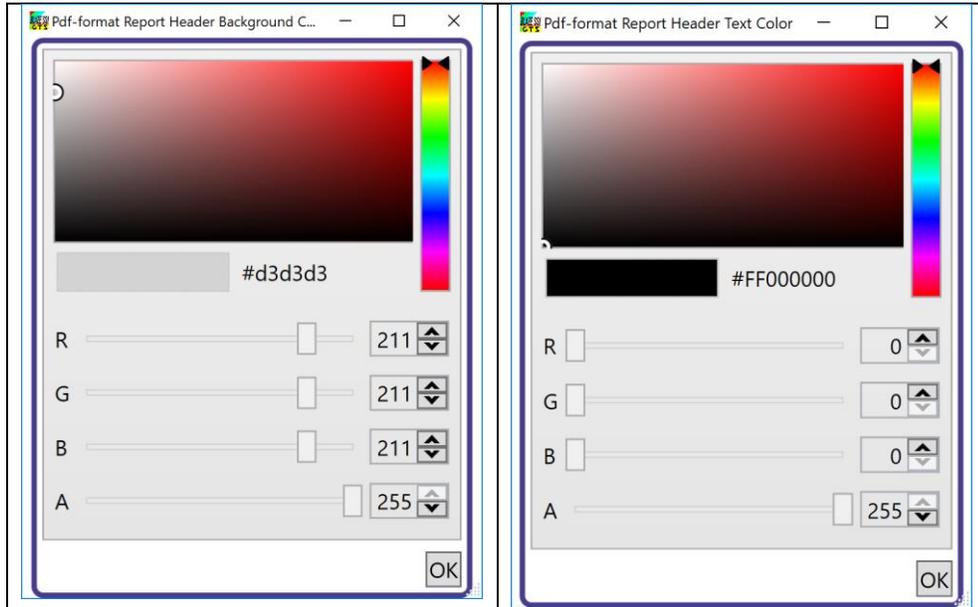
The screenshot displays the GTS software interface. The main window is titled 'GTS' and contains several sections:

- User Input:** A list of input fields for 'Census', 'Plan Provisions', 'Assumptions', and 'Census Subgroup Benefits & Contributions'.
- Test Summary: Run Tests:** A prominent green button.
- Reports and Charts:** A section with two columns: 'Excel Format' and 'PDF Format'. The 'PDF Format' column has checkboxes for various reports and charts, including 'Cover Page', 'Allocation of Contributions By Source', 'Detailed Allocation of Contributions By Source', 'Test Results', '401(a)(4) Accrual Rate Test', 'Plan Provisions', and several 'Chart' options like 'Chart: Contributions by Source', 'Chart: Sponsor Contributions without Eligible Employee Deferrals', etc.
- Test Results:** A section with a list of test details, including '415 Test Details', '416 Test Details', '401(A)(26) Test Details', '410(B) Test Details', '401(a)(4)NAR Test Details', '70% Average Benefit Test Details', 'Gateway Test Details', and 'Additional Test Details'. A 'View Mortality Tables' button is at the bottom.
- Right Panel:** Contains the BLAZE SSI logo and website, 'GTS Intro Guide', 'About GTS', 'New System Highlights!', 'License & Activation...', and copyright information. It also features input fields for 'GTS Archive:', 'Custom Workbook Template:', and 'Plan Name:'. Below these are buttons for 'Open Existing Data Set', 'Save Current Data Set', and 'Print From Excel'.
- Bottom Right Panel:** Contains controls for 'PDF Reports' and 'PDF Charts', each with 'Select All' and 'Select None' buttons. It also includes color selection for 'Pdf Header Text Color' and 'Pdf Header Background Color', a checked 'Include Alloc Rpt Subtotals' checkbox, and a 'Request PDF Reports and Charts' button.

Friday, December 30, 2022 1:51 PM

### Selecting the Pdf-format Header Colors

The pdf-format report header text and background color may be selected by entering the desired colors in hexadecimal format or by using the 'Select Color' buttons on the right of the GTS main window. The default colors are black (#000000) for the text color and light gray (#d3d3d3) for the background color which are appropriate for a non-color printer.



### User-specific Logo for the Pdf-format Cover Page

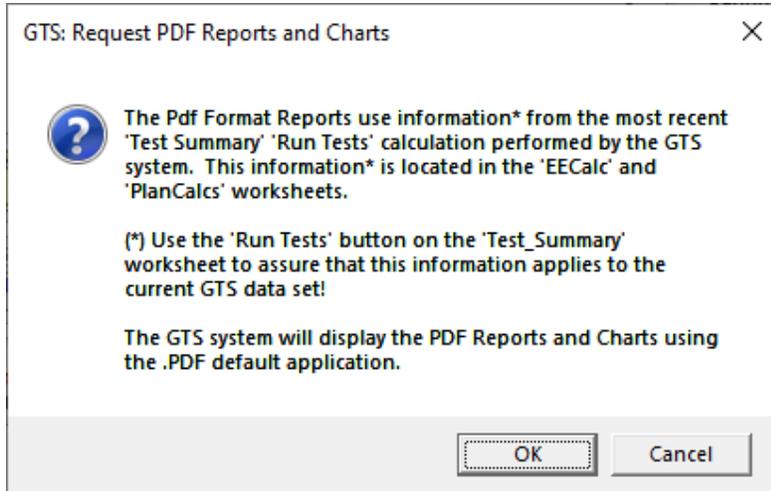
If the user has selected the pdf-format cover page to be included in the requested pdf-format file, GTS can incorporate a user-specific logo on that cover page. If the user has not provided a logo, none will be included on that cover page.

In the example provided in this document the BLAZE SSI logo has been included, but it will not be included on the user's pdf-format cover page.

Contact the BLAZE SSI HelpLine for more information about this feature of GTS at [help@blazessi.com](mailto:help@blazessi.com).

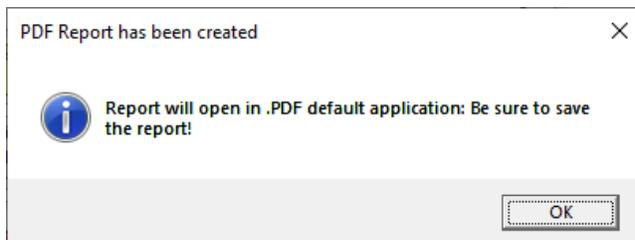
## Requesting the Selected Pdf-format Reports and Charts

Single [left] click the 'Request PDF Reports and Charts' button on the right side of the GTS main window. A message box will be presented.



Click the OK button to continue the process. GTS will gather the necessary information from the current GTS data set and test results, return the pdf-format file.

When the pdf-format file is available GTS will present a message box.



The pdf-format reports and charts will be presented using the user-selected pdf viewer on the workstation. The pdf-format charts are 2-D charts.

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1 of 10

PROPOSAL FOR:  
**SAMPLE PLAN**

EFFECTIVE DATE OF PLAN(S):  
**January 1, 2015**

VALUATION DATE:  
**December 31, 2023**

PREPARED FOR:  
**XYZ COMPANY  
RST PARTNERSHIP**

DATE PREPARED:  
**March 23, 2023**



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2 of 10

**PROPOSAL  
SAMPLE PLAN**  
Valuation Date: December 31, 2023  
Summary of Plan(s) Provisions

Plan Effective Date: 1/1/2015  
Valuation Date: 12/31/2023

**Eligibility Requirements:**  
Minimum Months of Service: 12  
Minimum Age: 21  
Entry Date: 1st Day of Plan Year Nearest the Satisfaction of the Requirements

**Normal Retirement:**  
Minimum Age: 65  
Minimum Years of Employment Service: 0  
Minimum Years of Plan Participation: 5  
Date: 1st Day of Month Following the Satisfaction of the Requirements

Vesting Schedule: 3-Year Cliff (100% after 3 years)

**Death Benefit:**  
Defined Benefit Plan: N/A  
Profit Sharing Plan: 100% of the Account Balance

**Accrued Benefit:**  
Defined Benefit Plan: N/A  
Profit Sharing Plan: Account Balance

Top Heavy Status: Plan(s) are not Top-Heavy

**Benefit/Allocation:**

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5 of 10

**PROPOSAL  
SAMPLE PLAN**  
Valuation Date: December 31, 2023  
Current Annual Allocations

Employee Name	Date of Birth	Date of Hire	Total Annual Compensation	C S G	Defined Contribution Profit-sharing Contribution	Employee Elective Deferral without catch up	Total Contributions with Deferrals
1.1	1/1/1970	1/1/2000	\$305,000.00	H	1	\$15,250.00	\$20,500.00
2.2	1/1/1970	1/1/2000	\$200,000.00	H	1	\$10,000.00	\$20,500.00
3.3	1/1/1970	1/1/2000	\$50,000.00	H	0	\$2,500.00	\$5,000.00
HC EE's			\$505,000.00	H		\$25,250.00	\$41,000.00
Other EE's			\$50,000.00			\$2,500.00	\$5,000.00
All EE's			\$555,000.00			\$27,750.00	\$46,000.00
% to HC EE's				H		90.99%	89.13%
% to Other EE's						9.01%	10.87%

CSG indicates census sub-group  
HC indicates highly-compensated employees defined by RC414(i)

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7 of 10

**PROPOSAL  
SAMPLE PLAN**  
Valuation Date: December 31, 2023  
IRC 410(b) Minimum Coverage Test

All plans are subject to this test. Two or more plans may be aggregated in order to pass this test. There are two ways that this test can be passed. One of two tests must be satisfied to satisfy the minimum coverage requirement. The two tests are referred to as the Ratio Test and the Average Benefits Test.

**70% Ratio Test:**  
All employees, except those who may be excluded under IRC 1.410(b)-6, must be considered for this test. The ratio of the NHC who are benefiting under the plan(s) is compared to the ratio of the NHC who are benefiting under the plan(s). If the NHC benefiting ratio is at least 70% of the HCE benefiting ratio this test is passed.

**NDC - Average Benefit% Test:**  
To pass this two-part test both the "Non-discriminatory Classification Test" and the "Average Benefit% Test" must be satisfied. The NDC Test requires that the classification of employees excluded from the plan(s) being tested is established under objective business criteria that identify the category of the employees covered and either the Safe Harbor % Test or the Facts and Circumstances Test is satisfied. The Average Benefit% Test requires that all plans of the sponsor have a "Benefit Ratio" of 70%. For this test "imputed disparity" and "cross testing" may be used.

**SUMMARY OF IRC 410(b) TEST  
Result: PASS**

**A. 70% Ratio% Test**

1. Number of HC Employees eligible to participate in the plan:	2
2. Number of HC Employees participating in the plan:	2
3. % of HC Employees participating in the plan: 100 x (2)/(1)	100%
4. Number of non-HC Employees eligible to participate in the plan:	1
5. Number of non-HC Employees participating in the plan:	1
6. % of non-HC Employees participating in the plan: 100 x (5)/(4)	100%
7. Ratio %: 100 x (6)/(3)	100%
8. Is Ratio % greater than or equal to 70%?	Yes

Test Passes

**B. NDC - Average Benefit% Test**

1. Benefit Ratio % for the HC Employees:	4.16%
2. Benefit Ratio % for the non-HC Employees:	4.63%
3. Benefit Ratio %:	111.43%
4. Is (3) greater than 70%?	Yes

Ratio % test is satisfied

5. Safe Harbor %:	50%
6. Unsafe Harbor %:	40%
7. Ratio %: (A)/(7):	100%

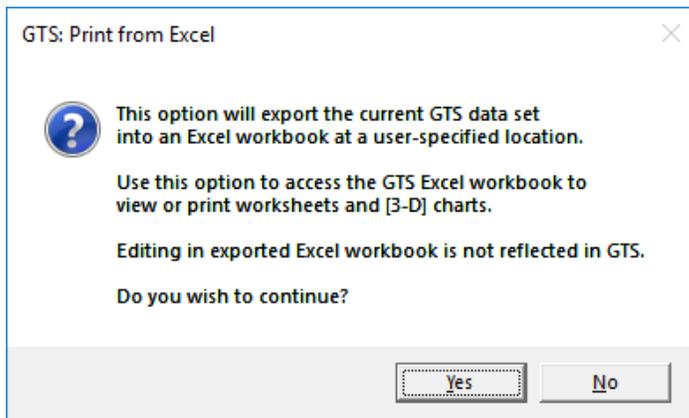
8. Result: Reasonable classification test required

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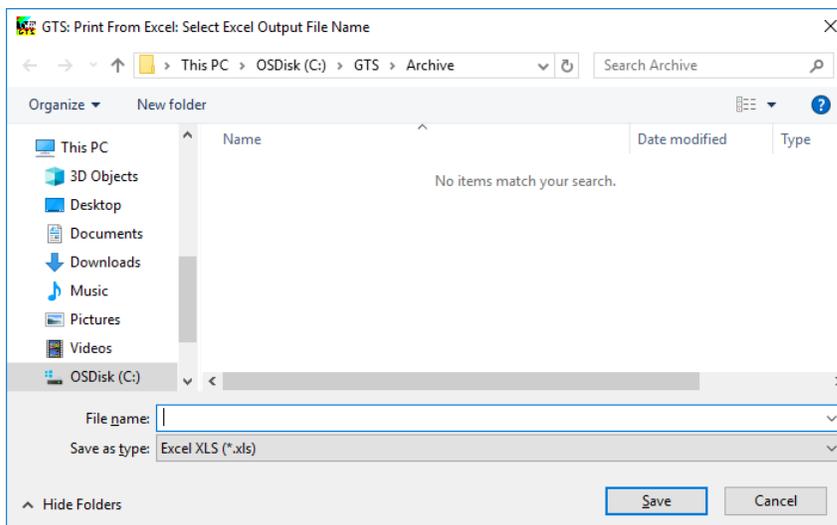
## Print From Excel

Use this option to export the GTS user input and testing results to an Excel workbook so that they may be printed using Excel. This option is useful because the 3-D charts are reduced to 2-D charts when printed in pdf-format or displayed within GTS. The exported Excel workbook is not designed to incorporate the full functionality of GTS.

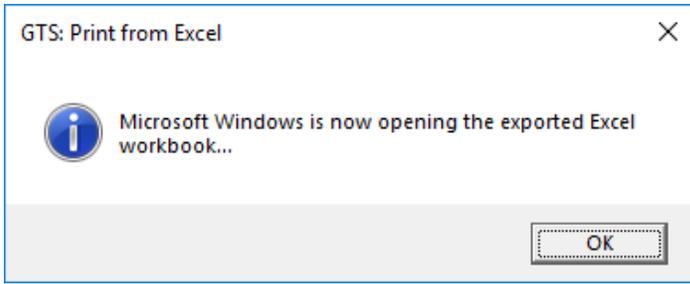
- Click on the 'Print From Excel' button on the right side of the GTS main window.
- When the information message box is presented, click the 'Yes' button.



- When the 'GTS: Print From Excel: Select Output File Name' dialog is presented the default target folder is the 'GTS Archive' folder specified on the GTS Main Window. Browse to the desired location for the export file, enter the desired export file name and click the 'Save' button.



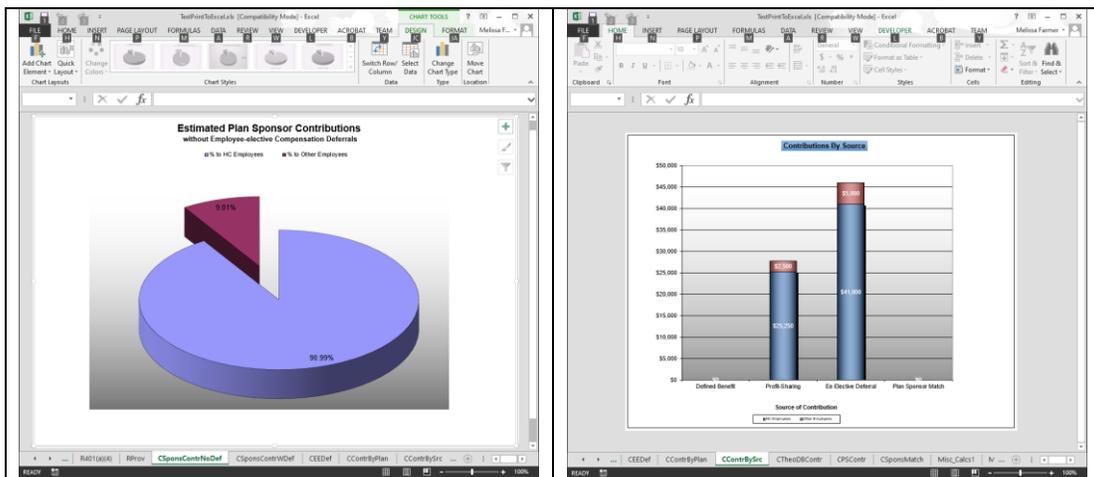
- If the process is successful a message box will be presented.



- The exported Excel workbook will be opened by Excel on the workstation. Click the 'Enable Content' button [which may be different in various versions of Excel] to permit access to the exported workbook.

SocSec# or EE ID#	First Name	Last Name	Date of Birth	Date of Hire	Plan Compensation	HCE Status	KEY Status	EE Elective Compensation Deferral w/o Catch-Up
	1 1	1	1/1/1960	1/1/1990	\$300,000.00	1	1	18000.00
	2 2	2	1/1/1960	1/1/1990	\$200,000.00	1	0	18000.00
	3 3	3	1/1/1960	1/1/1990	\$50,000.00	0	0	5000.00

- View the reports and 3-D charts by selecting the appropriate tabs at the bottom of the spreadsheet.

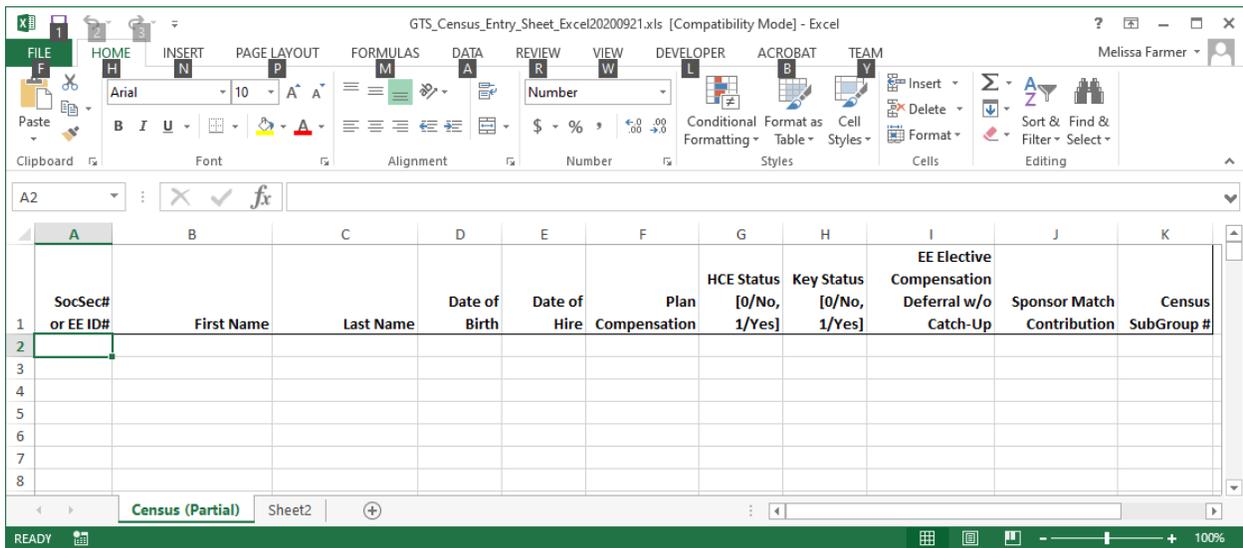


## GTS User-distributable Census Collection Worksheet

GTS provides a convenient, formatted and validated Excel worksheet which the GTS user can distribute to a [potential] plan sponsor or administrator. After the census collection worksheet is completed, the GTS user can copy and paste [Paste Special > Values] to the GTS Census worksheet.

Follow the instructions in the 'Download the GTS Installer' section to access the BLAZE SSI Download page for GTS. Click on the 'Download Census Entry Sheet' button.

The downloaded file is the user-distributable GTS census collection worksheet.



The worksheet should be used to organize the census data, performing any sorting here prior to doing a copy and paste [Paste Special > Values] to the GTS Census worksheet.

## Additional Fields and Options on the GTS Main Window

### GTS Archive

This field is the user-editable, default address for file operations in GTS, such as Save Current Data Set and Open Existing Data Set.

### Custom Workbook Template

This field is the user-editable, default plan/employee data set. The user can enter the full file name of the custom data set or use the browse ('...') button to select the file (\*.090). Once a file is selected, the data will be loaded as the default data for the current and subsequent worksessions. To restore the BLAZE SSI-provided template, the user can delete any selection made in the Custom Workbook Template field and the original BLAZE SSI default data (Plan Name: SAMPLE PLAN) will be restored.

If the user selects a custom workbook template data file, that file must be present in the selected location when GTS is subsequently launched or a message will indicate the file could not be found and the BLAZE SSI default data will be restored automatically for that worksession. The same message will be received each time GTS is launched unless the user 1) restores the custom workbook template file to the selected location, 2) selects another custom workbook template file, or 3) deletes the text in the "Custom Workbook Template" field on the main window so that the BLAZE SSI default data will be restored for all future worksessions.

When establishing a custom workbook template, it should be noted that this is a convenience for the user and reduces the input of the Assumptions and Plan Provisions. The census must always be input for a new plan, no "dummy" employee can be placed in the first employee row.

### About GTS

Click this button to observe the module names and version numbers of the components used by GTS.

## GTS Data Input

The GTS 'cells' which receive user input incorporate validation to assure that only appropriate data is accepted into the system. The required data for the GTS system may be manually input, or copied from another source, e.g. a Microsoft Excel worksheet and pasted, into the applicable GTS 'cells'. **When pasting information into GTS, it is necessary to use Paste Special > Values.** Failure to use Paste Special > Values can corrupt the cell formula and validation of the affected cells, rendering GTS inoperative.

## Plan Sponsor Deduction Rules

GTS provides information regarding the IRC404 combined plan sponsor maximum deductible contribution. This information is an estimate for illustration purposes only since it does not reflect the plan assets, contributions or annual actuarial valuation results. Actual plan contributions can only be determined after the plans' annual valuation has been performed and in the case of a defined benefit plan, the valuation must be performed under the supervision of an Enrolled Actuary.

## Communicating the Plan Contribution to the Plan Sponsor

Care must be taken when presenting the plan 'cost' or current minimum required or maximum permitted contribution for the plan year to the plan sponsor. This care is especially necessary for a cash balance plan which incorporates the concept of a theoretical cash balance contribution on behalf of plan participants.

The plan sponsor may erroneously assume that the plan 'cost' or current minimum or maximum annual contribution will be the sum of the 'theoretical cash balance contributions' for the plan participants' theoretical cash balance account. *This will not necessarily be the case.*

The GTS user should discuss with the plan's Enrolled Actuary the funding method to be used, the assumptions and the valuation date to be used prior to communicating the plan 'cost' to the plan sponsor. It may be appropriate to recommend a range of plan contributions between the IRC430 minimum required contribution and the IRC404 maximum deductible contribution, especially if the plan provides for benefits payable in a lump sum form.

Starting in 2008 plan years, PPA2006 specifies the plan's funding method and assumptions including 'segmented' interest rates to determine the minimum required and maximum deductible actual contributions for the plan. These rules mean that the plan's minimum required contribution and the plan's maximum deductible contribution will not necessarily be the same as the sum of the theoretical cash balance contribution for the plan participants.

## Limits on the Number of participants

GTS is designed for plan designs with a census of less than 1,000 employees. GTS does not provide support for the '105% IRC417(e)' prong of the IRC415 maximum defined benefit limit calculation which applies if a defined benefit plan is being illustrated with more than 100 employees in the census. The current limit on employees implies that the Combined NAR/MVAR test in GTS has a limit on HCE's of 20% of the maximum number of employees in the census.

## Maintenance Updates and Customer-requested Enhancements

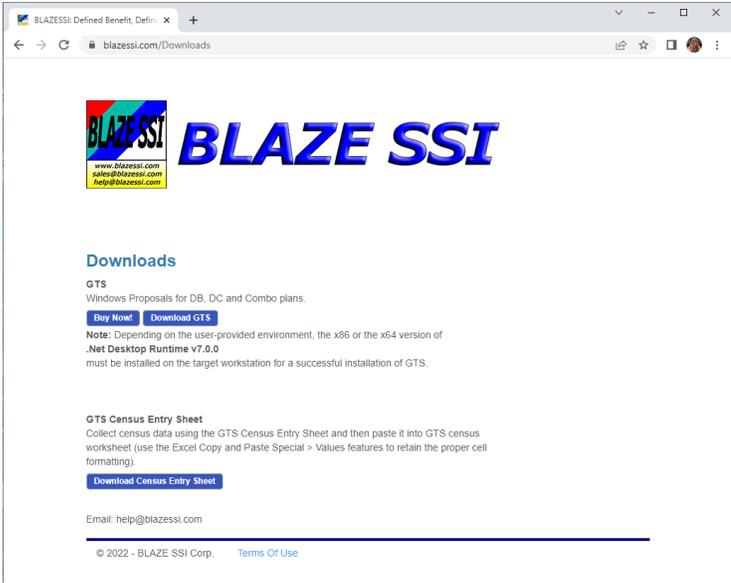
GTS and GTS maintenance updates are available from BLAZE SSI Corp. on a subscription basis. Consult the license and subscription agreement for details. BLAZE SSI Corp. [the exclusive developer and distributor of the GTS product] and George Taylor [the designer of the initial version of the GTS product and contributor to the maintenance of the GTS product] welcome customer comments and suggestions.

Contact the BLAZE SSI HelpLine at [help@blazessi.com](mailto:help@blazessi.com) to provide comments, suggestions or submit a request for BLAZE SSI analysis of a specific GTS issue or feature.

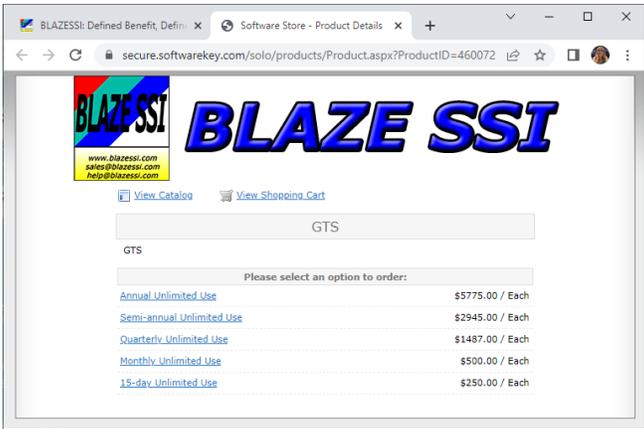
## GTS Licensing Options

GTS is licensed on a subscription basis with unlimited use. Currently annual, semi-annual, quarterly, monthly and 15-day subscriptions are offered. Note that because GTS is licensed on a calendar year basis, the options available for selection may be limited based on the date the user is attempting to purchase a license (i.e. Annual subscription option is not available after January).

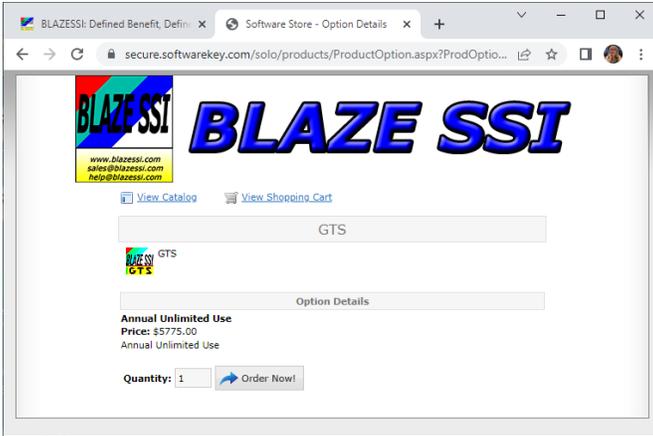
GTS can be licensed directly at [www.blazessi.com](http://www.blazessi.com) by selecting the "CLICK HERE to start using GTS now" button, then the 'Buy Now!' button.



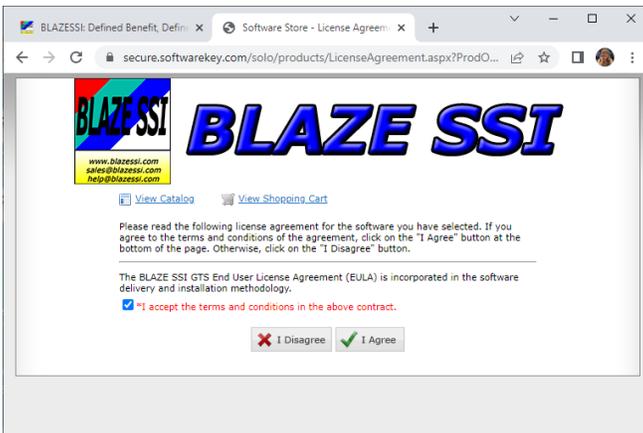
The BLAZE SSI online store will be presented and the desired subscription can be selected.



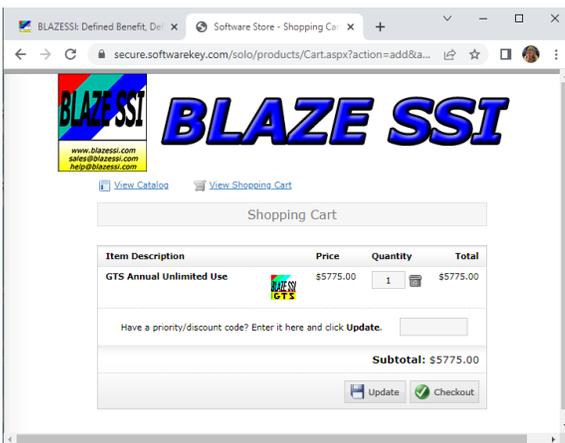
If more than one person will use GTS in a company, additional activations (workstations) can be purchased at a discounted rate. After updating the quantity, click the 'Order Now!' button.



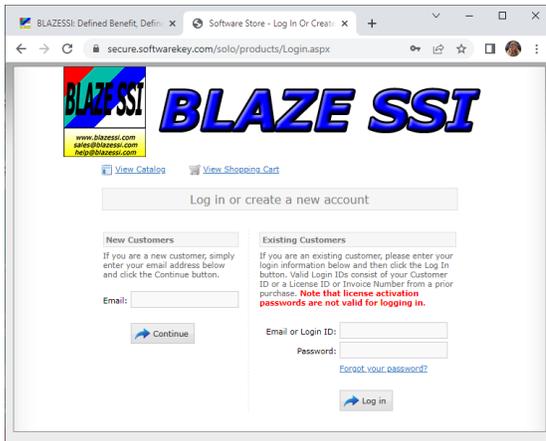
Acceptance of the license agreement is required to continue the purchase.



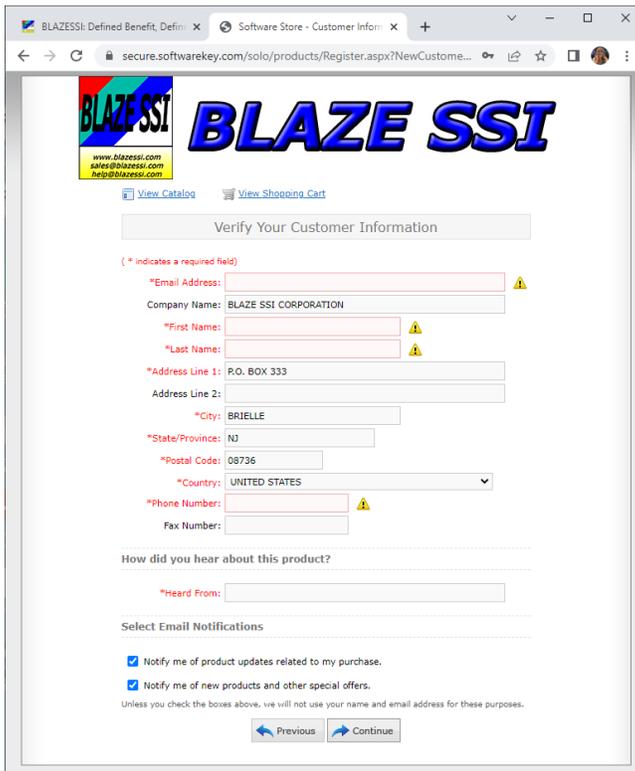
After a final review of the shopping cart, click the 'Checkout' button.



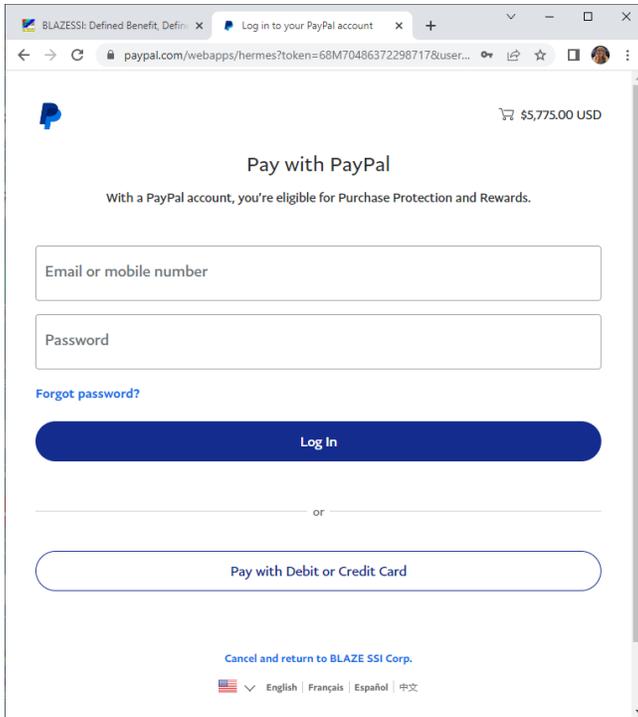
New customers will enter their email, existing customers that have previously logged into the Customer License Portal, enter your credentials.



Enter or update your customer information, then click 'Continue'.



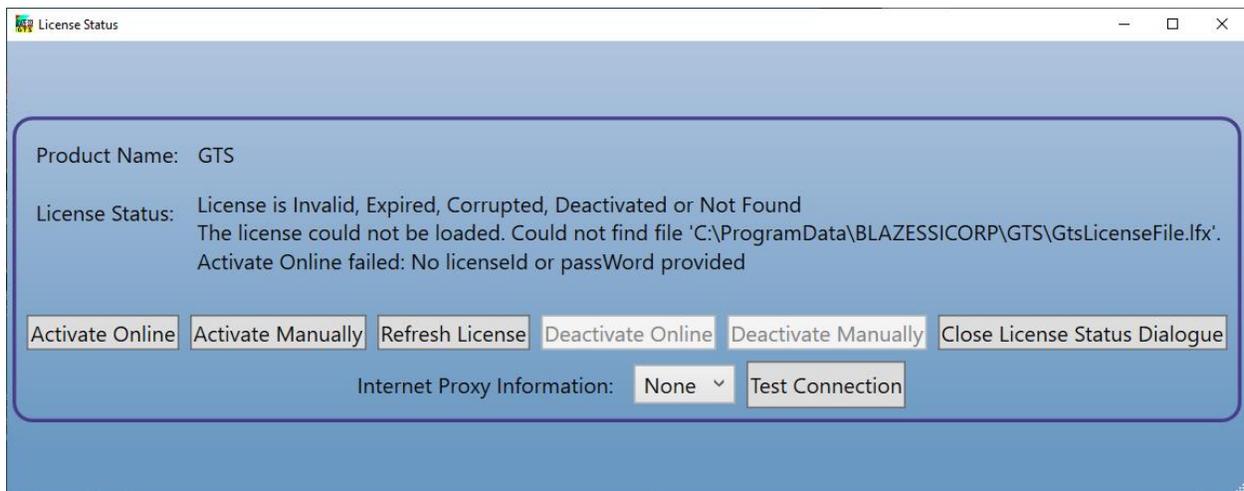
After confirming your order, you can 'Proceed to Payment' and you can choose to pay via a PayPal account or with Debit or Credit Card.



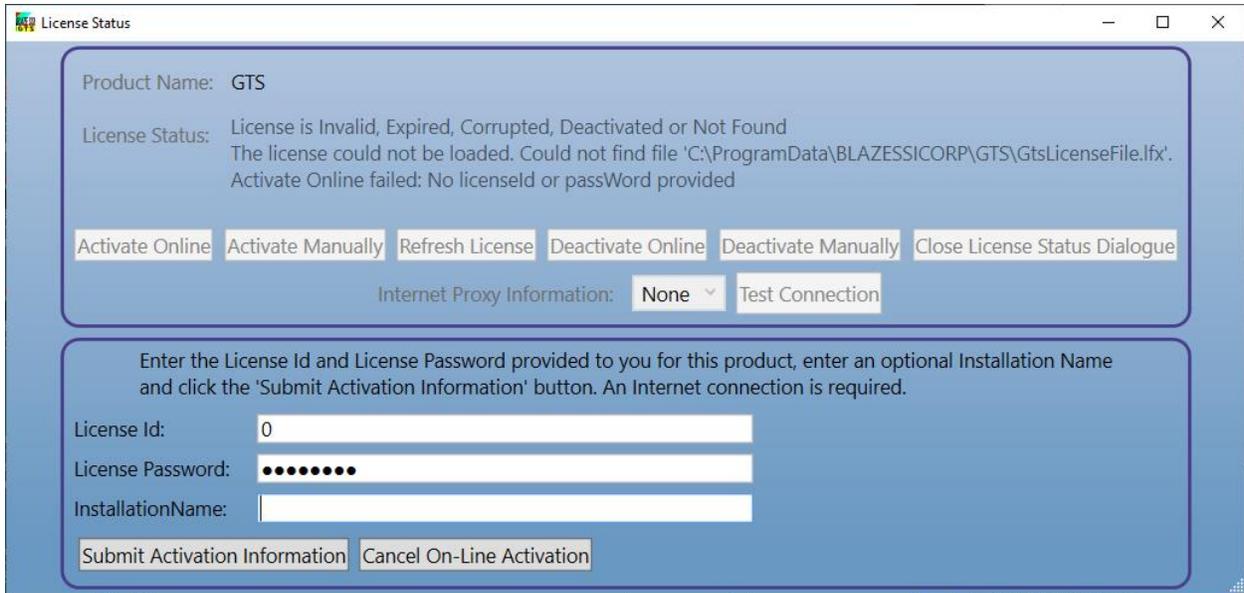
When payment is successful, you will receive an email containing a License ID and Activation Password.

## GTS License Activation

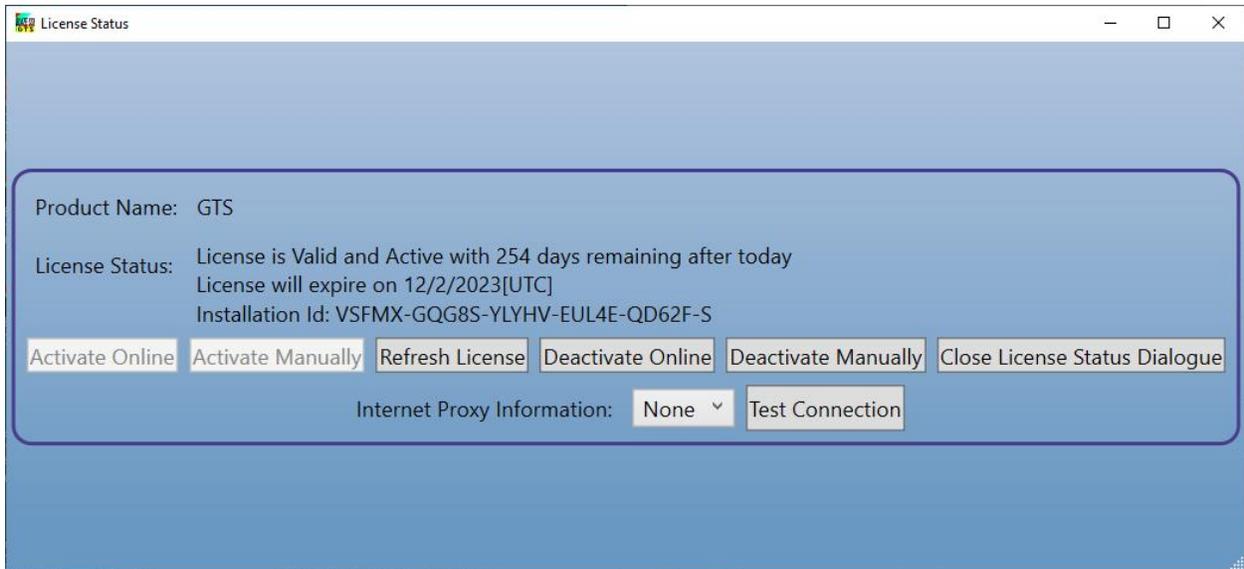
Once you have downloaded the GTS software and run the installer (refer to the 'Installing GTS to a Workstation' section of this document for details), start up GTS and you will be presented with the License Status screen.



Click 'Activate Online', enter the License ID and License Password that you were provided via email (the InstallationName is optional), and click 'Submit Activation Information'.



Assuming you entered the credentials properly, you will be presented with an updated License Status screen.



Click 'Close License Status Dialogue' and begin using GTS.