

The Budget Analysis and Reporting System

"BARS"

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The Budget Analysis and Reporting System ("BARS")

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number of departments and/or accounts. There is no limit on the number of tiers such a hierarchy might include.

The exact department numbers which will be available is controlled by the operators of the IBM System 36 and its Budget Control System.

This type of detailed reporting is based upon information "downloaded" from the System 36 into a Personal Computer. Thus the local reports are always a perfect reflection of the most current BCS data.

Report Lines

In order to treat the specifications for a particular line on a BARS report, one need first either click the mouse over the line number, or maneuver over to the line number using the arrow keys and press the space bar. The "Line Type" window that will then open is illustrated in figure 2-7.

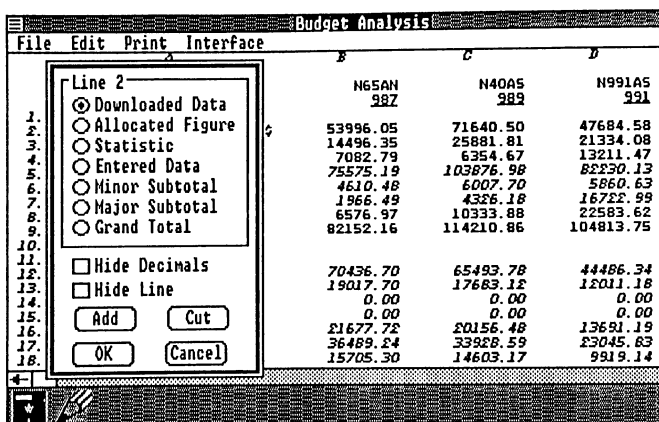


Figure 2-7, Treating A Report Line

Note that the options to "Hide Decimals", and to "Hide Lines" are offered. The first is used to properly display lines which do not include dollar figures. A line identified with this check mark will appear on the report as a whole number.

The option to hide a line is provided as a convenience when building more complicated reports. Often, one may wish to summarize a similar group of expenses within a report. While BCS data is available according to a fixed set of summary groupings, certain groupings are peculiar to particular sets of departments. Indeed, one set of groupings may be appropriate to one set of reporting requirements, while a different set may be required for another. Providing this type of flexibility is one of the system's primary design goals.

Once a line is hidden, it appears on the computer display in italics, and is not included at all in the printed report. More information concerning hidden lines is presented below under "Minor Subtotal".

Note that lines may be added or removed using the buttons "Add", and "Cut", respectively. When adding, the current line becomes the new line, and all others are pushed toward the bottom of the report. When cutting, the current line is simply removed.

As with report columns, there are a number of item types from which to choose. They are as follows:

- *Downloaded Data* - This option is used to designate that an array of numbers is to be retrieved from the BCS. Choosing this option opens a window, as illustrated in figure 2-8.

Here one specifies the account which is to be placed across the current line. Including a zero as the account number will cause the total for the entire department to be represented. Note that the department which applies to each figure throughout the line will be determined by the department associated with each individual column. It follows, then, that those columns which do not have a department associated with them will not have BCS data posted within them. These alternative

column and line crossings might have column subtotals, or perhaps variance analyses.

In order for data to be successfully downloaded, a number of parameters are required. Which account number is to be used must,

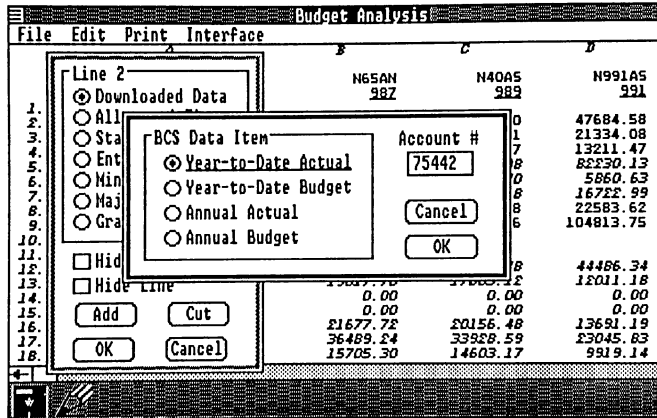


Figure 2-8, Downloading Data

of course, be included. An account number of zero will cause the totals for entire departments to be included in the appropriate columns. Also, which data item within the account is applicable must be indicated by checking one of the buttons in the appropriate section.

Note that in the illustration, Year-to-Date Actual and Budget, as well as Annual Actual and Budget are available. Other information can be added to this set with the cooperation of both the BARS and the System 36 programmers.

- *Allocated Figure* - One of BARS most useful features is its ability to spread particular costs across departments according to a specified figure. For example, such a capability is used by the aviation department to divide salaries and fuel costs for the entire aviation group across each aircraft according to the number of miles that each aircraft flew. Although the number of miles a plane has flown is not available from the BCS, BARS will allow an operator to type in this or any other data (see the section below entitled "Entered Data").

The window which opens when "Allocated Figure" is chosen is illustrated in figure 2-9.

A number of parameters must be included to allow an allocation. First, BCS department and account numbers must be supplied. Including a zero as the account number will result in the total for the entire department to be subject to allocation. Also, which figure from within the given department and account is to be used must be specified. Which figures are offered depends upon the installation, but normally at least Year-to-Date Actual and Budget, as well as monthly Actual and Budget figures are made available. These parameters define which cost is to be allocated. The line which contains the figures which are to be used as a template for the allocation must also be included. The figures in the indicated line are taken as a percentage

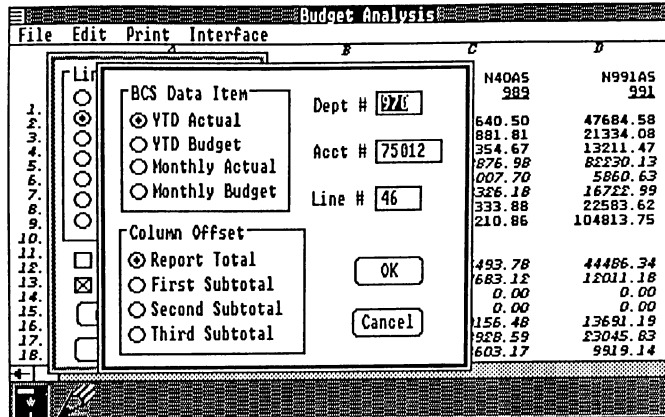


Figure 2-9, Allocating A Cost

of the total for that line, and this percentage is applied for use in determining what portion of the specified department's account is to be included in the current line.

The item "Offset" is also required. Normally, this will be set to "Report Total" to indicate that the allocated costs are to be distributed across the entire report. It is permitted, however, to allocate costs within a limited range of columns. The range is defined by the subtotal which sets it off from the rest of the report: in either the first, second or third instance. As with imported columns, no facility is provided for referring to anything beyond a third subtotal instance. An example of a limited range applied to a cost allocation is included in the sample reports.

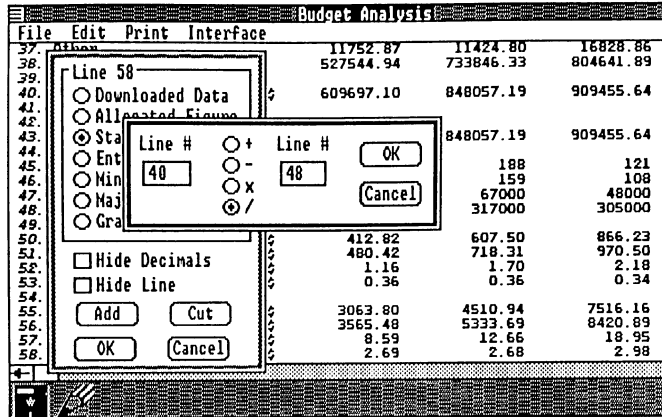


Figure 2-10, Performing A Statistical Analysis

- *Statistic* - BARS allows simple arithmetic associations to be defined between two separate lines. A report line may consist of one line either subtracted, added, multiplied or divided by another. This is useful for the creation of performance criteria. For example, once again using the aviation group, one might wish to see which aircraft are operating at the lowest cost per passenger actually carried to a destination. This reveals how efficiently aircraft are being utilized.

Figure 2-10 illustrates the window which must be filled in to create a statistic. One line number is simply compared with another, according to a set of possible operations. Division by zero is defined under BARS as the numerator of the delinquent equation. Additional arithmetic operations can be made available with the cooperation of a BARS programmer.

- *Entered Data* - Often, data is required for analysis which is simply not available from the BCS. Tagging a line as data to be entered will cause BARS processing to pass over the line. Prior to processing, an operator may simply type in the required data. Of course, the line may still be associated with allocations, statistics, variances, subtotals and/or totals.

- *Minor Subtotal* - The minor subtotal is normally used to amalgamate a number of accounts into a single figure. For instance, a Facilities and Services department might wish to summarize a particular set of fixed fuel costs for analysis. These costs might be individually downloaded, and tagged as hidden lines. A minor subtotal might then be created, and labeled as "Fixed Fuel Costs". Only this line would appear on the final report, and the subtotals and totals on the report would include the figures only once.

- *Major Subtotal* - This type of subtotal is more broad than the minor subtotal. They are designed to be used to group larger numbers of report lines. Most importantly, hidden lines are not included in a major subtotal. Minor subtotals are designed for use in totaling hidden lines (see above). As with minor subtotals, major subtotals are set to zero after they appear. The sample reports included in this guide illustrate the use of both major and minor subtotals.

- *Grand Total* - This type of line is similar to a major subtotal in that it includes only non-hidden lines and minor subtotals. It is not set to zero after use, however, and thus might function as a fourth layer of report subtotalling. Most often, however, it is used only once to "foot" the report.

Summary of Menu Options

The BARS System contains a number of menu options not yet touched on. For review, each menu option is described below. Note that some options are available only when editing a report. Others are available only when no report has been retrieved or created, and still others may be used at any time.

Menu	Option	Description	Availability
File	Retrieve	Brings a selected report to the screen.	When not Editing
	Copy	Copies a file's contents.	At All Times
	Delete	Removes a File from the Computer.	At All Times
	New Name	Gives a File a New Name.	At All Times
Edit	Save	Writes a Report to the Computer Disk.	When Editing
	Process	Fetches S/36 Data and Performs any Required Math. The Option "S/36" from the "Interface" may be required first.	At All Times
	New	Creates a New Report.	When Not Editing
	Freeze	Anchors Report Column and Lines Descriptions at the Top and Left, Respectively. Useful when Performing Data Entry.	At All Times
Print	Report	Prints the Current Report. Titles Are Available for Each Report, and Hidden Lines May be Printed if Desired.	When Editing
	Template	A Blueprint of the Report Is Printed, with All Account and Department Information, as Well as The Specifications for Allocations and Statistics.	When Editing
	Host File	The System 36's ledger file is printed.	At All Times
	Interface	S/36 The System 36 is Contacted for the Latest Data.	At All Times
	Text	Report Output for use in a Word Processor.	
	SFD	Report Output in "System Data Format".	When Editing
	DIF	Report Output in "Data Interchange Format" for use as a Lotus 1-2-3 Spreadsheet.	When Editing

on-site training, or simply help over the phone are all available. Thank you for your attention to BARS, and we wish you the best of luck in fulfilling your data processing requirements.

Allied-Signal Aviation

YTD ACTUAL (Including Hidden Lines; Support and Operating Costs Only)

Apr. 1 1988 Year-to-Date

	N65AN 987	N40AS 989	N991AS 991	Total Fixed Wing	Helicopter 981	Total Rotary Wing	Total Morristown Aviation
Operating Costs							
Fuel	53,996.05	71,640.50	47,684.58	173,321.13	13,439.66	13,439.66	186,760.79
Maintenance	14,496.35	25,881.81	21,334.08	61,712.24	29,087.57	29,087.57	90,799.81
Employee Expenses	7,082.79	6,354.67	13,211.47	26,648.93	6,014.18	6,014.18	32,663.11
Clerk, Minor, Subtotal	75,575.19	103,976.98	88,830.15	261,682.30	48,511.11	48,511.11	310,693.71
Commissary	4,610.48	6,007.70	5,860.85	16,478.81	1,908.51	1,908.51	17,787.32
Flight Fees	1,866.49	4,266.18	16,782.99	23,015.66	9,595.10	9,595.10	32,610.76
Commissary & Fees	6,766.97	10,333.88	22,583.62	39,494.47	10,903.61	10,903.61	50,398.08
Total Operating Costs	82,152.16	114,210.86	104,813.75	301,176.77	59,445.02	59,445.02	360,621.79
Support Costs							
Fixed Wing Salaries	70,436.70	65,493.78	44,498.31	180,416.82	0.00	0.00	180,416.82
Fixed Wing Fringes	19,017.70	17,683.18	15,011.18	48,712.00	0.00	0.00	48,712.00
Rotary Wing Salaries	0.00	0.00	0.00	0.00	62,453.38	62,453.38	62,453.38
Rotary Wing Fringes	0.00	0.00	0.00	0.00	16,857.00	16,857.00	16,857.00
Admin. Sal. - 1	21,677.72	20,156.48	13,691.19	55,525.39	12,677.03	12,677.03	68,202.42
Admin. Sal. - 2	36,489.24	35,828.59	23,015.83	95,483.66	21,338.73	21,338.73	114,802.39
Administration Fringes	15,705.30	14,603.17	9,919.14	40,227.61	9,184.39	9,184.39	49,412.00
Salaries and Fringes	163,326.66	151,865.14	103,153.68	418,345.48	122,490.53	122,490.53	540,836.01
Insurance	15,488.00	29,538.00	35,076.00	80,102.00	46,872.00	46,872.00	126,974.00
Hangar Operations	51,978.59	48,330.97	32,828.58	133,138.14	30,396.83	30,396.83	163,534.97
Breakpoint Minor Sub.	67,466.59	77,868.97	67,901.58	213,240.14	77,268.83	77,268.83	290,508.97
Depreciation	0.00	459,657.32	592,468.72	1,052,146.04	146,116.48	146,116.48	1,200,862.52
Lease	263,793.77	471,182.59	592,468.72	1,327,465.08	148,116.48	148,116.48	1,475,581.56
Lease/Depreciation	263,793.77	471,182.59	592,468.72	1,327,465.08	148,116.48	148,116.48	1,475,581.56
Crew Training	21,205.05	21,504.83	24,266.05	66,975.93	13,234.08	13,234.08	80,210.01
Department Total	387,843.63	611,772.39	769,337.66	1,798,953.68	272,610.98	272,610.98	2,071,564.66
Less Operating Costs	305,881.17	597,561.59	661,582.91	1,497,776.91	213,195.96	213,195.96	1,710,972.87
Less Insurance	290,203.47	498,085.59	699,417.91	1,417,671.91	166,923.96	166,923.96	1,584,595.87
Less Lease	29,409.70	29,840.94	36,193.19	90,209.83	18,207.48	18,207.48	108,417.31
Breakpoint Minor Sub.	1,031,353.32	1,715,703.92	2,124,534.72	4,871,591.26	683,402.46	683,402.46	5,555,193.72
Less Crew Training	5,204.65	5,896.11	12,693.14	23,893.90	4,873.40	4,873.40	28,207.30
Department 970	80,331.21	74,893.33	50,795.50	205,760.64	46,877.31	46,877.31	252,757.85
Department 971	89,543.67	83,259.80	56,553.90	229,357.47	0.00	0.00	229,357.47
Department 977	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other-Including Salaries	175,078.53	163,289.91	119,982.54	458,351.01	79,290.98	79,290.98	537,642.00
Other	11,732.87	11,424.80	16,828.86	40,066.53	8,750.56	8,750.56	48,757.09
Total Support Costs	527,544.94	733,846.33	804,641.89	2,066,033.16	369,860.48	369,860.48	2,435,893.64

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