



**Computer Financial Modeling Workshops, Inc.**

# ***Financial Ratio Model***<sup>®</sup>



**Excel**<sup>®</sup> Version

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· Email [cfmw@adelphia.net](mailto:cfmw@adelphia.net) · Web site: <http://www.formodel.com/> ·

## Financial Ratio Model®

The Financial Ratio Model uses Microsoft Excel® to measure and analyze an institution's financial strengths and weakness. Financial ratio analysis provides a ready means of focusing on how well the institution is performing. As a test, the ratios can be measured against the institutions strategic plan. Financial ratios are used by many different groups including: rating agencies, investors, accrediting bodies, board of trustees, internal committees, and other interested parties.

Built into the model are columns for prior year results for both the Statement of Financial Position, and the Statement of Activities. The Financial Ratio Model also has five additional columns designed for projecting ratios five years out based on the assumptions. The assumption table flows to the five year projections. Charts are also included which change with each iteration of the model.

Computer Financial Modeling Workshops can assist your institution with customization the Financial Ratio Model for a reasonable fixed cost. Please call for further details.

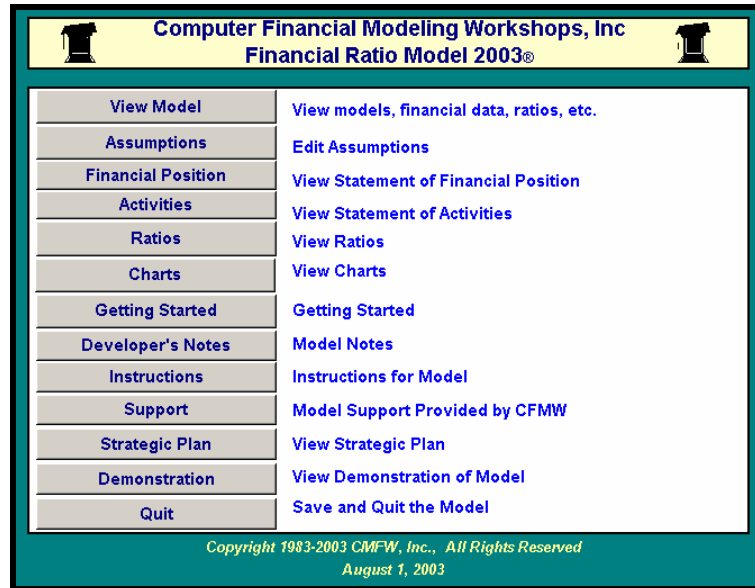
## Financial Ratio Model® Special Features

Worksheets specifically designed to capture information on:

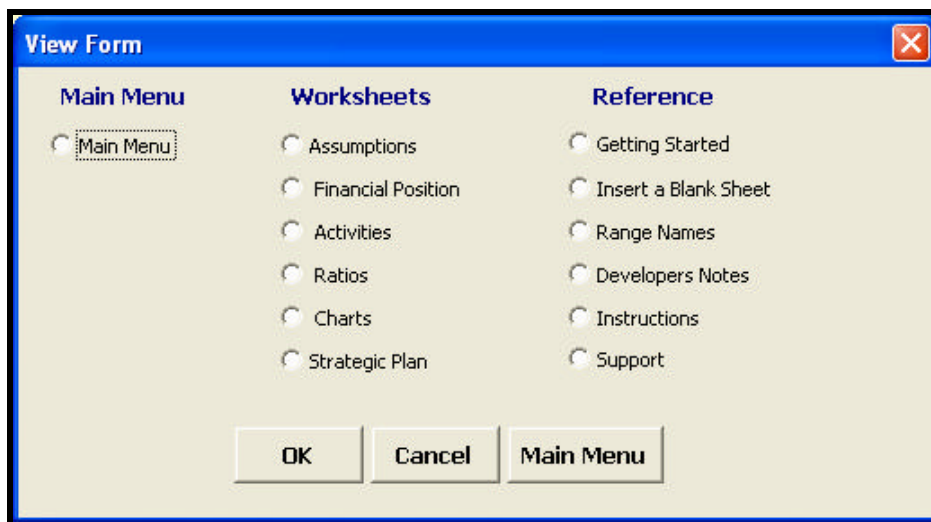
- Assumptions
- Financial Position
- Activities
- Ratios
- Charts
- Strategic Plans
- Custom Control Buttons & Menus
- Excel Forms and Dialog Boxes
- Range Names
- Visual Basic Macros
- Custom Excel Formula
- Help Routines

# Navigating through the Financial Ratio Model

1. When the Financial Ratio Model is opened the **Main Menu** worksheet is displayed



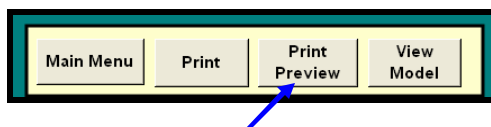
2. Click the **View Model** button to navigate through the model. When the button is clicked the form below will open:



3. Select the **Assumptions** option button and click **OK** to advance to the **Assumptions** worksheet.

|    | Account                             | 2004 | 2005 | 2006 | 2007 | 2008 |
|----|-------------------------------------|------|------|------|------|------|
| 6  | Cash and cash equivalents           | 1000 | 0%   | 0%   | 0%   | 0%   |
| 7  | Student accounts receivable, net of | 1100 | 0%   | 0%   | 0%   | 0%   |
| 8  | Other receivables                   | 1200 | 0%   | 0%   | 0%   | 0%   |
| 9  | Contributions receivable, net       | 1300 | 0%   | 0%   | 0%   | 0%   |
| 10 | Deferred charges and prepaid expel  | 1400 | 0%   | 0%   | 0%   | 0%   |
| 11 | Investments held for long-term purp | 1500 | 0%   | 0%   | 0%   | 0%   |
| 12 | Notes receivable, net of allowances | 1600 | 0%   | 0%   | 0%   | 0%   |
| 13 | Property, plant and equipment, net  | 1700 | 0%   | 0%   | 0%   | 0%   |
| 14 | Accounts payable                    | 2000 | 0%   | 0%   | 0%   | 0%   |
| 15 | Accrued expenses                    | 2100 | 0%   | 0%   | 0%   | 0%   |
| 16 | Deferred revenues                   | 2200 | 0%   | 0%   | 0%   | 0%   |
| 17 | Student deposits                    | 2300 | 0%   | 0%   | 0%   | 0%   |
| 18 | Accrued postretirement benefits     | 2400 | 0%   | 0%   | 0%   | 0%   |
| 19 | Long-term debt                      | 2500 | 0%   | 0%   | 0%   | 0%   |
| 20 | U.S. Government Refundable          | 2600 | 0%   | 0%   | 0%   | 0%   |
| 21 | Unrestricted                        | 3000 | 0%   | 0%   | 0%   | 0%   |
| 22 | Temporarily restricted              | 3100 | 0%   | 0%   | 0%   | 0%   |

4. On the top of the worksheet are four buttons. Click the Print Preview button to view the print layout of the Assumptions worksheet.



5. On the Assumption worksheet are the accounts that appear on the Statement of Financial Position and the Statement of Activities. Accounts may be added or deleted,

6. The year columns are used to forecast a percent change, either plus or minus. The corresponding amounts on either the Statement of Financial Position or the Statement of Activities will be changed by the percentage entered on the Assumptions worksheet.

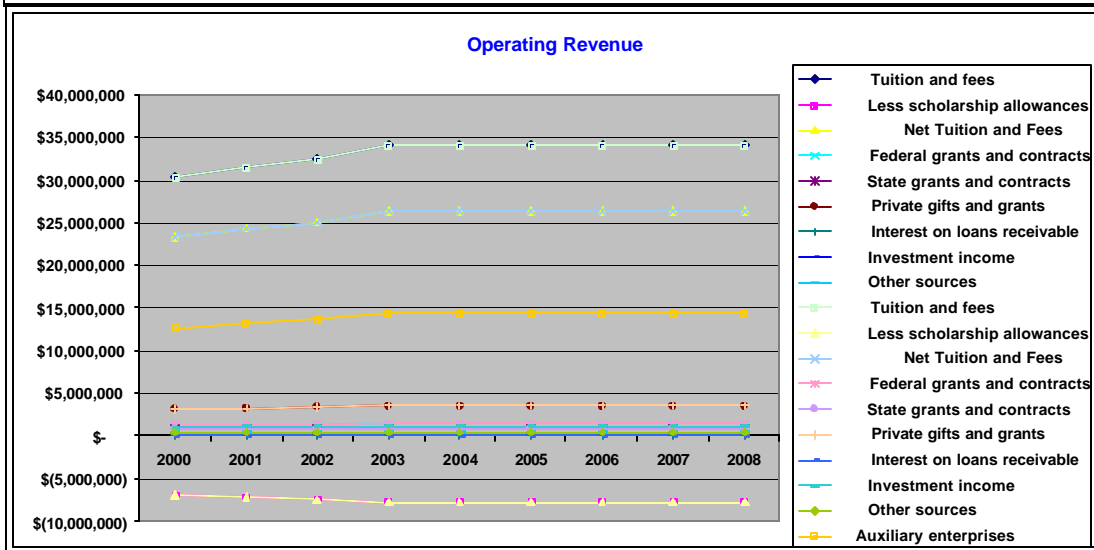
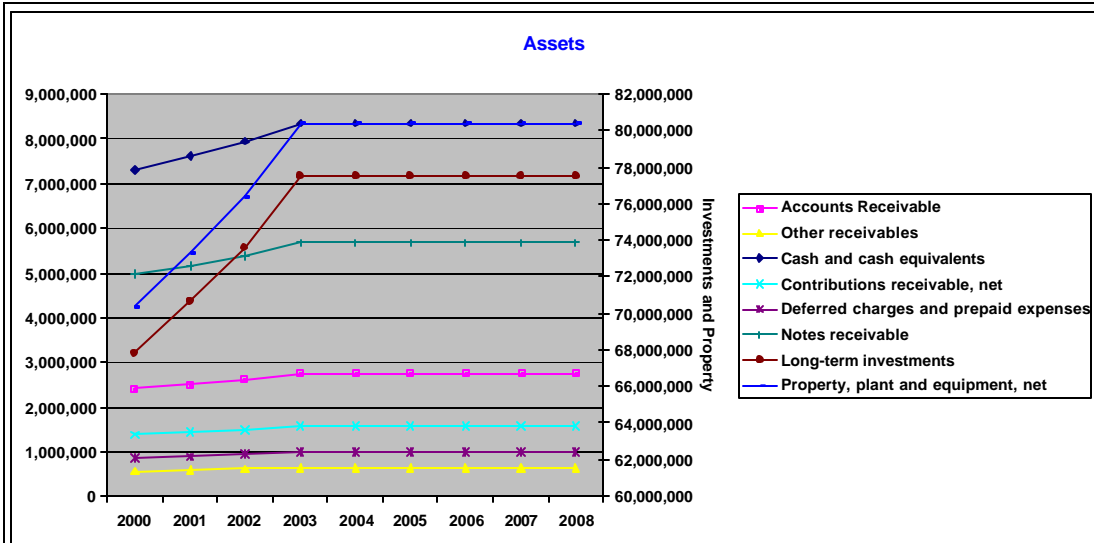
| <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; padding-bottom: 5px;"> <span>Main Menu</span> <span>Print</span> <span>Print Preview</span> <span>Demo</span> <span>View Model</span> </div> |         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|---|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Statement of Financial Position   | Account | Actual 2000           | Actual 2001           | Actual 2002           | Budget 2003           | Proj. 2004            | Proj. 2005            | Proj. 2006            | Proj. 2007            | Pct 2007              |
| <b>Assets</b>   |         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Cash and cash equivalents   | 1000    | \$ 7,310,592          | \$ 7,615,200          | \$ 7,932,500          | \$ 8,350,000          | \$ 8,767,500          | Increased by 5%       |                       | \$ 9,201,875          | \$ 8,350,000          |
| Accounts Receivable   | 1100    | 2,407,680             | 2,508,000             | 2,612,500             | 2,750,000             | 2,750,000             | 2,750,000             | 2,750,000             | 2,750,000             | 2,750,000             |
| Other receivables   | 1200    | 569,088               | 592,800               | 617,500               | 650,000               | 650,000               | 650,000               | 650,000               | 650,000               | 650,000               |
| Contributions receivable, net   | 1300    | 1,378,944             | 1,436,400             | 1,496,250             | 1,575,000             | 1,575,000             | 1,575,000             | 1,575,000             | 1,575,000             | 1,575,000             |
| Deferred charges and prepaid expenses   | 1400    | 866,765               | 902,880               | 940,500               | 990,000               | 990,000               | 990,000               | 990,000               | 990,000               | 990,000               |
| Long-term investments   | 1500    | 67,852,800            | 70,880,000            | 73,625,000            | 77,500,000            | 77,500,000            | 77,500,000            | 77,500,000            | 77,500,000            | 77,500,000            |
| Notes receivable  | 1600    | 4,968,576             | 5,175,600             | 5,391,250             | 5,675,000             | 5,675,000             | 5,675,000             | 5,675,000             | 5,675,000             | 5,675,000             |
| Property, plant and equipment, net  | 1700    | 70,381,808            | 73,324,800            | 76,380,000            | 80,400,000            | 80,400,000            | 80,400,000            | 80,400,000            | 80,400,000            | 80,400,000            |
| <b>Total Assets</b>   |         | <b>\$ 155,746,253</b> | <b>\$ 162,235,680</b> | <b>\$ 168,995,500</b> | <b>\$ 177,890,000</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> |
| <b>Liabilities and Net Assets</b>   |         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| <b>Liabilities:</b>   |         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Accounts payable  | 2000    | 1,637,222             | 1,705,440             | 1,776,500             | 1,870,000             | 1,870,000             | 1,870,000             | 1,870,000             | 1,870,000             | 1,870,000             |
| Accrued expenses  | 2100    | 4,627,999             | 4,820,832             | 5,021,700             | 5,286,000             | 5,286,000             | 5,286,000             | 5,286,000             | 5,286,000             | 5,286,000             |
| Deferred revenues   | 2200    | 963,072               | 1,003,200             | 1,045,000             | 1,100,000             | 1,100,000             | 1,100,000             | 1,100,000             | 1,100,000             | 1,100,000             |
| Student deposits  | 2300    | 1,120,666             | 1,167,360             | 1,216,000             | 1,280,000             | 1,280,000             | 1,280,000             | 1,280,000             | 1,280,000             | 1,280,000             |
| Accrued postretirement benefits   | 2400    | 393,984               | 410,400               | 427,500               | 450,000               | 450,000               | 450,000               | 450,000               | 450,000               | 450,000               |
| Long-term debt  | 2500    | 60,513,070            | 64,436,814            | 68,523,841            | 74,434,541            | 74,434,541            | 74,434,541            | 74,434,541            | 74,434,541            | 74,434,541            |
| Federal Student Loan Advances   | 2600    | 7,091,712             | 7,387,200             | 7,635,000             | 8,100,000             | 8,100,000             | 8,100,000             | 8,100,000             | 8,100,000             | 8,100,000             |
| <b>Total Liabilities</b>  |         | <b>76,347,725</b>     | <b>80,931,246</b>     | <b>85,705,541</b>     | <b>92,520,541</b>     | <b>92,520,541</b>     | <b>92,520,541</b>     | <b>92,520,541</b>     | <b>92,520,541</b>     | <b>92,520,541</b>     |
| <b>Net Assets</b>   |         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Unrestricted  | 3000    | 65,723,396            | 66,309,559            | 68,137,459            | 69,419,459            | 69,419,459            | 69,419,459            | 69,419,459            | 69,419,459            | 69,419,459            |
| Temporarily restricted  | 3100    | 2,743,600             | 2,898,000             | 3,040,000             | 3,200,000             | 3,200,000             | 3,200,000             | 3,200,000             | 3,200,000             | 3,200,000             |
| Permanently restricted  | 3200    | 10,931,532            | 11,508,325            | 12,102,500            | 12,750,000            | 12,750,000            | 12,750,000            | 12,750,000            | 12,750,000            | 12,750,000            |
| <b>Total Net Assets</b>   |         | <b>79,398,528</b>     | <b>81,304,434</b>     | <b>83,289,959</b>     | <b>85,369,459</b>     | <b>85,369,459</b>     | <b>85,369,459</b>     | <b>85,369,459</b>     | <b>85,369,459</b>     | <b>85,369,459</b>     |
| <b>Total Liabilities and Net Assets</b>   |         | <b>\$ 155,746,253</b> | <b>\$ 162,235,680</b> | <b>\$ 168,995,500</b> | <b>\$ 177,890,000</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> | <b>\$ 178,307,500</b> |

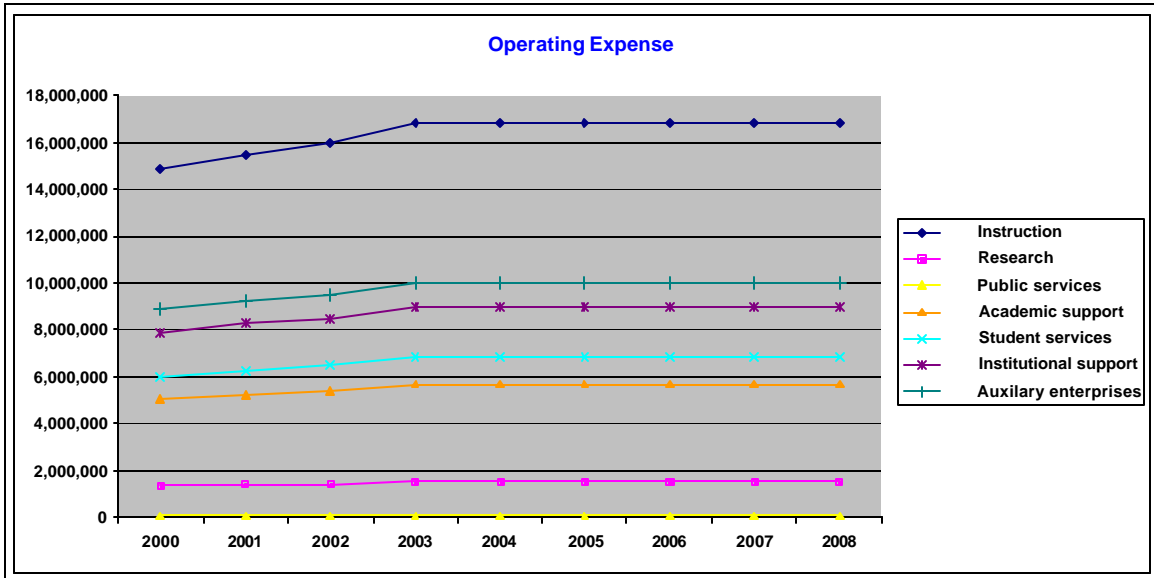
| <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; padding-bottom: 5px;"> <span>Main Menu</span> <span>Print</span> <span>Print Preview</span> <span>Demo</span> <span>View Model</span> </div> |         |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|---|---------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Statement of Activities   | Account | Actual 2000       | Actual 2001       | Actual 2002       | Budget 2003       | Proj. 2004        | Proj. 2005        | Proj. 2006        | Proj. 2007        | Pct 2007          |
| <b>Operating revenues:</b>  |         |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Tuition and fees  | 4000    | \$ 30,298,320     | \$ 31,561,375     | \$ 32,537,500     | \$ 34,250,000     | \$ 35,962,500     | Increased by 5%   |                   | \$ 37,758,750     | \$ 34,250,000     |
| Less scholarship allowances   | 4100    | (6,900,192)       | (7,187,700)       | (7,410,000)       | (7,800,000)       | (7,800,000)       | (7,800,000)       | (7,800,000)       | (7,800,000)       | (7,800,000)       |
| <b>Net Tuition and Fees</b>   |         | <b>23,398,128</b> | <b>24,373,675</b> | <b>25,127,500</b> | <b>26,450,000</b> | <b>28,162,500</b> | <b>28,162,500</b> | <b>28,162,500</b> | <b>28,162,500</b> | <b>28,162,500</b> |
| Federal grants and contracts  | 4200    | 1,282,728         | 1,336,175         | 1,377,500         | 1,450,000         | 1,450,000         | 1,450,000         | 1,450,000         | 1,450,000         | 1,450,000         |
| State grants and contracts  | 4300    | 840,408           | 875,425           | 902,500           | 950,000           | 950,000           | 950,000           | 950,000           | 950,000           | 950,000           |
| Private gifts and grants  | 4400    | 3,171,434         | 3,303,578         | 3,405,750         | 3,595,000         | 3,595,000         | 3,595,000         | 3,595,000         | 3,595,000         | 3,595,000         |
| Interest on loans receivable  | 4500    | 22,116            | 23,038            | 23,750            | 25,000            | 25,000            | 25,000            | 25,000            | 25,000            | 25,000            |
| Investment income   | 4600    | 1,105,800         | 1,151,875         | 1,197,500         | 1,250,000         | 1,250,000         | 1,250,000         | 1,250,000         | 1,250,000         | 1,250,000         |
| Other sources   | 4700    | 420,204           | 437,713           | 451,250           | 475,000           | 475,000           | 475,000           | 475,000           | 475,000           | 475,000           |
| Auxiliary enterprises   | 4800    | 12,672,468        | 13,200,488        | 13,608,750        | 14,325,000        | 14,325,000        | 14,325,000        | 14,325,000        | 14,325,000        | 14,325,000        |
| <b>Total Revenues and Gains</b>   |         | <b>42,913,896</b> | <b>44,701,965</b> | <b>46,084,500</b> | <b>48,910,000</b> | <b>50,222,500</b> | <b>50,222,500</b> | <b>50,222,500</b> | <b>50,222,500</b> | <b>50,222,500</b> |
| Net Assts released From Restricted satisfaction of program restrictions   |         | 1,592,352         | 1,658,700         | 1,710,000         | 1,800,000         | 1,800,000         | 1,800,000         | 1,800,000         | 1,800,000         | 1,800,000         |
| <b>Total Revenues, Gains, and Other Support</b>   |         | <b>44,506,238</b> | <b>46,360,665</b> | <b>47,794,500</b> | <b>50,310,000</b> | <b>52,022,500</b> | <b>52,022,500</b> | <b>52,022,500</b> | <b>52,022,500</b> | <b>52,022,500</b> |
| <b>Operating Expenses:</b>  |         |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| <b>Educational and general:</b>   |         |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Instruction   | 5000    | 14,861,952        | 15,481,200        | 15,960,000        | 16,800,000        | 16,800,000        | 16,800,000        | 16,800,000        | 16,800,000        | 16,800,000        |
| Research  | 5100    | 1,326,960         | 1,382,250         | 1,425,000         | 1,500,000         | 1,500,000         | 1,500,000         | 1,500,000         | 1,500,000         | 1,500,000         |
| Public services   | 5200    | 54,848            | 57,133            | 59,900            | 62,000            | 62,000            | 62,000            | 62,000            | 62,000            | 62,000            |
| Academic support  | 5300    | 5,042,448         | 5,252,550         | 5,415,000         | 5,700,000         | 5,700,000         | 5,700,000         | 5,700,000         | 5,700,000         | 5,700,000         |
| Student services  | 6000    | 6,015,552         | 6,266,200         | 6,460,000         | 6,800,000         | 6,800,000         | 6,800,000         | 6,800,000         | 6,800,000         | 6,800,000         |
| Institutional support   | 7000    | 7,917,528         | 8,247,425         | 8,502,500         | 8,950,000         | 8,950,000         | 8,950,000         | 8,950,000         | 8,950,000         | 8,950,000         |
| <b>Total Educational and General</b>  |         | <b>35,219,288</b> | <b>36,696,758</b> | <b>37,821,400</b> | <b>39,812,000</b> | <b>39,812,000</b> | <b>39,812,000</b> | <b>39,812,000</b> | <b>39,812,000</b> | <b>39,812,000</b> |

7. The Ratio worksheet contains the ratios that are calculated from the Statement of Financial Position and Statement of Activities. By changing the percents on the Assumption worksheet the ratios will be recalculated.

|  |   | Main Menu   | Print       | Print Preview | Demo        | View Model |                       |            |            |  |  |
|--|---|-------------|-------------|---------------|-------------|------------|-----------------------|------------|------------|--|--|
| Management Ratios  | Formula   | Actual 2000 | Actual 2001 | Actual 2002   | Budget 2003 | Proj. 2004 | Proj. 2005            | Proj. 2006 | Proj. 2007 |  |  |
| Reserve Ratio  | $\frac{\text{Expendable Net Assets}}{\text{Total Expense}}$   | 132.91%     | 132.65%     | 133.77%       | 133.77%     | 133.77%    | 133.77%               | 133.77%    | 133.77%    |  |  |
| Return of Net Assets                                       | $\frac{\text{Change in Net Assets}}{\text{Total Net Assets (beginning of year)}}$   | 2.36%       | 2.40%       | 2.44%         | 2.50%       | 0.00%      | 0.00%                 | 0.00%      | 0.00%      |  |  |
| Net Income Ratio - using an operating indicator            | $\frac{\text{Excess (Deficiency) of Unrestricted Operating Revenues Over Unrestricted Operating Expenses}}{\text{Total Unrestricted Operating Income}}$ | 2.62%       | 2.61%       | 2.62%         | 2.60%       | 5.87%      | 5.87%                 | 5.87%      | 5.87%      |  |  |
| Net Income Ratio - using change in unrestricted net assets | $\frac{\text{Change in Unrestricted Net Assets}}{\text{Total Unrestricted Income}}$   | 145.46%     | 2.52%       | 2.53%         | 2.51%       | 0.00%      | 0.00%                 | 0.00%      | 0.00%      |  |  |
| Cash Income Ratio  | $\frac{\text{Net Cash Provided by Operating Activities}}{\text{Total Unrestricted Income, Excluding Gains}}$  | 58.57%      | 56.23%      | 54.54%        | 51.83%      | 50.05%     | Note change in ratio. | 50.05%     | 50.05%     |  |  |
| Operating Income Ratio                                     | $\frac{\text{Operating Income}}{\text{Educational and General Expenses}}$   | 84.54%      | 84.54%      | 84.54%        | 84.54%      | 88.85%     | 88.85%                | 88.85%     | 88.85%     |  |  |
| Net Tuition Dependency Ratio                               | $\frac{\text{Net Tuition and Fees}}{\text{Operating Income}}$   | 52.57%      | 52.57%      | 52.57%        | 52.57%      | 54.14%     | Note change in ratio. | 54.14%     | 54.14%     |  |  |
| Net Tuition per Student FTE Ratio                          | $\frac{\text{Net Tuition and Fees}}{\text{Full Time Equivalent Students}}$  | 10,636      | 10,597      | 10,470        | 10,580      | 11,265     | 11,265                | 11,265     | 11,265     |  |  |
| Net Auxiliary Income Ratio                                 | $\frac{\text{Net Auxiliary Enterprise Revenues}}{\text{Total Unrestricted Income, Excluding Gains}}$  |             |             |               |             |            |                       |            |            |  |  |

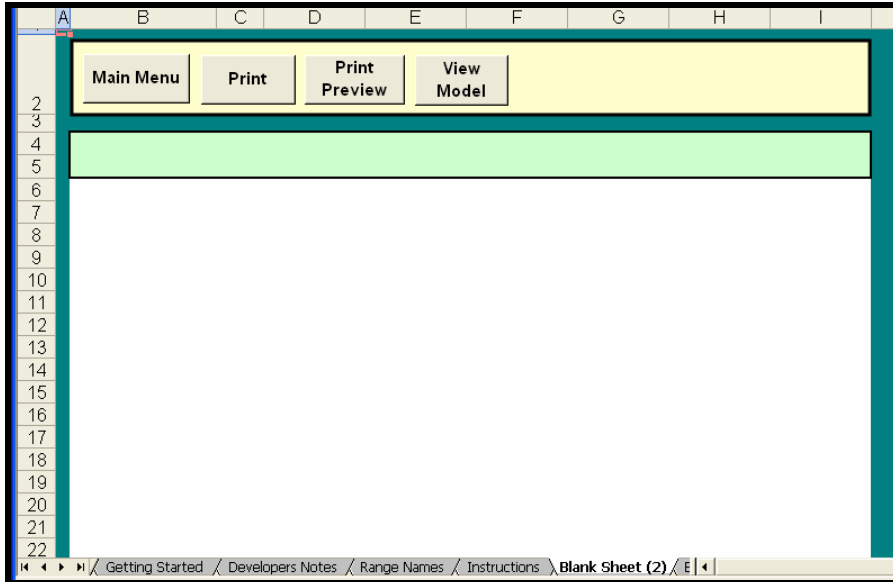
8. On the chart worksheet are the charts for the model. These charts will change when the forecast are made by changes on the Assumption worksheet.





9. The Strategic Plan sheet is used to document the plan and measure results with the addition of the ratios in the model.
  
10. The Developers Notes worksheet is used to document changes to the model The Range Name worksheet is a list of all the range names in the model.
  
11. The Instruction worksheet contains procedures for specific model modification.

12. A worksheet named Blank Sheet is provided. If additional worksheets are required, on the Main Menu worksheet click View Model and select Insert a Blank Sheet, and then click OK. A blank worksheet will be inserted into the workbook. The worksheet then can be modified as need. Macros will have to be created for the Print and Print Preview buttons (see Instructions worksheet). Also, you should consider adding an option button to the View form.



## Computer Financial Modeling Workshops Order Form

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**Computer Financial Modeling Workshop (or CFMW),  
41 Chestnut Street, Sharon, PA 16146**

**Federal Tax ID: 16-1338405**

|  |  |               |                              |                     |
|--|--|---------------|------------------------------|---------------------|
| <b>First Name:</b>   |  | <b>M.I</b>    | <b>Last Name:</b>            |                     |
| <b>Title:</b>  |  | <b>E-Mail</b> |                              |                     |
| <b>Organization</b>  |  |               |                              |                     |
| <b>Business Address</b>  |  |               |                              |                     |
| <b>City</b>  |  | <b>State</b>  | <b>Zip</b>                   |                     |
| <b>Business Phone</b>  |  | <b>Fax</b>    |                              |                     |
|  |  |               |                              |                     |
| <b>2003 Excel Five Year Budget Model : Higher Education - \$2495</b>   |  |               | <b>Quantity:</b> _____       | <b>Total:</b> _____ |
| <b>(NEW) Financial Ratio Model: Non-Profit - \$995</b>   |  |               | <b>Quantity:</b> _____       | <b>Total:</b> _____ |
| <b>Let us Build your Financial Ratio Model for you – Financial Ratio Model and customization for only \$2495</b>                   |  |               | <b>Quantity:</b> _____       | <b>Total:</b> _____ |
| <b>Shipping and Handling - \$20/Product</b>  |  |               | <b>Shipping Total:</b> _____ |                     |
|  |  |               | <b>Grand Total:</b> _____    |                     |
| <b>Credit Card #</b>   |  |               | <b>Expiration Date:</b>      |                     |
| <b>Address on Card:</b>  |  |               |                              |                     |
| <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> Discover <input type="checkbox"/> Am/Ex |  |               |                              |                     |

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