

## Budget Simulation Project

### Instructions:

The following figures represent the budget of your school district over the past four years. You are to:

- 1) Calculate all rows and columns in budget figures from 1996-99 and create a column chart displaying each budget year. The percentage difference from year to year in each category should be figured and placed in your spreadsheet.
- 2) Prepare a 2000 budget on any spreadsheet (preferably Microsoft Excel) reflecting estimated revenues and expenditures for this fiscal year and a column chart displaying your 2000 budget. The percentage difference from year to year in each category should be figured. Then add the percentage increases together and divide by three. The percentage you get will be the amount of increase you add to the 1999 figure to get your 2000 budget figure. Create a column chart reflecting your 2000 budget.
- 3) Prepare for me a 2001 budget with figures representing a 5% increase across the board reflecting estimated revenues and expenditures for this fiscal year and create a column chart displaying the figures. The 5 % increase should be based on your 2000 budget figures. Create a column chart reflecting your budget figures.
- 4) Prepare for me a 2002 budget with a 12½ % decrease in revenues and spending across the board. The 12 1/2 % decrease should be based on your 2001 budget figures. Create a column chart reflecting your budget figures.
- 5) Calculate the fund balances of fiscal years 1996 – 2002 and create a pie chart displaying the figures. The fund balance is the amount of revenue left over when expenditures are deducted from revenues.
- 6) Create a line chart displaying your budgets from 1996 – 2002.
- 7) Submit to me one hard copy of your budget and one electronic copy either on 3 1/2 floppy or CD if you have a computer with this technology. In summary, your budget should have the following sections:

Note: For every category dealing with expenditures and revenues a separate chart needs to be generated. For example, your 2000 budget figures should have one chart labeled 2000 budget revenues and 2000 budget expenditures, on separate pages. This needs to be repeated throughout the budget where you are asked to present both figures. Also, make sure each revenue and expenditure category is present in your chart. For example, distinguish between federal, state and local revenues etc.

### Section 1:

- Display the 1996 – 1999 budget figures with all rows and columns calculated
- Create a column chart for each budget year from 1996 – 1999 (4 years = 8 charts)

### Section 2:

- Create a 2000 budget reflecting estimated revenues and expenditures based on 1999 figures
- Create a column chart displaying your 2000 year budget (1 year = 2 charts)

### Section 3:

- Create a 2001 budget with figures representing an estimated 5% increase across the board in revenues and expenditures
- Create a column chart displaying your 2001 budget (1 year = 2 charts)

### Section 4:

- Create a 2002 budget with a 12 1/2% decrease in revenues and spending across the board
- Create a column chart displaying your 2001 budget (1 year = 2 charts)

### Section 5:

- Calculate the fund balances of fiscal years 1996 – 2002
- Create a pie chart displaying the figures (1 pie chart displaying total revenues for 7 years)

### Section 6:

- Create a line chart displaying your budgets from 1996 – 2002 (A seven year budget trend).
- This means you will need one line chart for revenues and one line chart for expenditures over the seven-year period.
- Remember that each year needs to be represented as well as each expenditure and expense.

SCHOOL DISTRICT 1: REVENUE AND SPENDING CATEGORIES

|                            | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> |
|----------------------------|-------------|-------------|-------------|-------------|
| <b>Revenues</b>            |             |             |             |             |
| Local                      | 5,853,963   | 8,358,775   | 9,595,979   | 15,985,713  |
| State                      | 10,357,159  | 12,604,136  | 13,633,679  | 14,622,228  |
| Federal                    | 5,628,275   | 6,521,577   | 2,404,286   | 2,003,646   |
| <b>Expenditures</b>        |             |             |             |             |
| Instruction                | 13,464,577  | 15,987,523  | 15,593,452  | 18,031,189  |
| Students                   | 854,029     | 1,134,434   | 966,810     | 1,175,481   |
| Instructional Staff        | 437,035     | 567,545     | 658,081     | 883,084     |
| General Administration     | 485,771     | 633,520     | 565,141     | 413,751     |
| School Administration      | 995,077     | 1,205,467   | 1,188,754   | 1,837,184   |
| Business                   | 396,796     | 500,407     | 559,623     | 614,333     |
| Operations and Maintenance | 1,849,951   | 2,405,591   | 3,507,937   | 3,518,499   |
| Transportation             | 702,578     | 987,780     | 828,303     | 1,204,234   |
| Central Facility           | 65,545      | 75,988      | 65,122      | 92,734      |
| Noninstructional Service   | 1,890,948   | 1,839,150   | 1,890,948   | 1,987,150   |
| Facility Construction      | 31,103      | 30,429      | 20,756      | 42,230      |
| Debt Service (Principal)   | 60,030      | 75,988      | 75,122      | 92,734      |

SCHOOL DISTRICT 2: REVENUE AND SPENDING CATEGORIES

|                            | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> |
|----------------------------|-------------|-------------|-------------|-------------|
| <b>Revenues</b>            |             |             |             |             |
| Local                      | 8,330,780   | 9,421,237   | 10,717,098  | 15,411,258  |
| State                      | 9,941,522   | 11,466,645  | 13,262,238  | 14,841,846  |
| Federal                    | 345,650     | 214,103     | 193,776     | 103,714     |
| <b>Expenditures</b>        |             |             |             |             |
| Instruction                | 12,595,753  | 13,867,447  | 15,492,848  | 17,774,419  |
| Students                   | 1,174,531   | 1,149,862   | 1,250,451   | 2,001,823   |
| Instructional Staff        | 1,079,860   | 1,985,109   | 1,161,328   | 1,475,488   |
| General Administration     | 426,152     | 460,488     | 482,315     | 470,011     |
| School Administration      | 1,103,552   | 1,424,777   | 1,560,342   | 1,850,780   |
| Business                   | 210,811     | 226,743     | 257,394     | 346,680     |
| Operations and Maintenance | 2,118,980   | 2,875,558   | 3,159,645   | 3,472,736   |
| Transportation             | 487,833     | 542,972     | 607,626     | 706,862     |
| Central Facility           | 101,035     | 131,583     | 176,964     | 184,859     |
| Noninstructional Service   | 288,718     | 441,803     | 654,540     | 715,123     |
| Facility Construction      | 59,755      | 44,539      | 46,075      | 47,388      |
| Debt Service (Principal)   | 56,214      | 46,075      | 51,841      | 52,134      |

SCHOOL DISTRICT 3: REVENUE AND SPENDING CATEGORIES

|                            | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> |
|----------------------------|-------------|-------------|-------------|-------------|
| <b>Revenues</b>            |             |             |             |             |
| Local                      | 8,215,844   | 11,015,431  | 12,538,208  | 12,213,568  |
| State                      | 18,457,895  | 19,193,646  | 20,867,066  | 28,122,515  |
| Federal                    | 407,893     | 357,794     | 340,567     | 315,677     |
| <b>Expenditures</b>        |             |             |             |             |
| Instruction                | 14,761,254  | 20,324,464  | 23,018,346  | 29,434,962  |
| Students                   | 961,496     | 1,035,185   | 1,494,660   | 1,642,523   |
| Instructional Staff        | 707,746     | 872,692     | 1,100,401   | 1,245,444   |
| General Administration     | 360,546     | 423,914     | 546,998     | 736,246     |
| School Administration      | 1,368,071   | 1,980,904   | 2,010,890   | 2,688,488   |
| Business                   | 120,744     | 116,988     | 141,723     | 170,748     |
| Operations and Maintenance | 1,516,081   | 2,866,501   | 2,895,559   | 3,879,372   |
| Transportation             | 1,642,824   | 1,703,120   | 1,984,798   | 2,401,037   |
| Central Facility           | 114,561     | 128,559     | 144,022     | 186,129     |
| Noninstructional Service   | 428,008     | 719,685     | 916,356     | 1,110,069   |
| Facility Construction      | 612,747     | 767,415     | 905,190     | 2,101,200   |
| Debt Service (Principal)   | 320,417     | 410,149     | 565,149     | 587,387     |

SCHOOL DISTRICT 4: REVENUE AND SPENDING CATEGORIES

|                            | <u>1996</u> | <u>1997</u> | <u>1998</u> | <u>1999</u> |
|----------------------------|-------------|-------------|-------------|-------------|
| <b>Revenues</b>            |             |             |             |             |
| Local                      | 6,937,298   | 7,922,799   | 8,699,202   | 9,200,707   |
| State                      | 3,279,303   | 3,772,806   | 4,540,850   | 5,712,568   |
| Federal                    | 2,287,176   | 2,430,593   | 2,358,799   | 2,243,931   |
| <b>Expenditures</b>        |             |             |             |             |
| Instruction                | 3,396,612   | 3,771,647   | 4,761,294   | 6,594,575   |
| Students                   | 211,829     | 221,417     | 238,359     | 314,361     |
| Instructional Staff        | 384,868     | 686,499     | 716,423     | 869,797     |
| General Administration     | 438,454     | 400,962     | 481,042     | 422,341     |
| School Administration      | 298,191     | 392,181     | 590,766     | 761,852     |
| Business                   | 77,253      | 99,495      | 116,478     | 143,874     |
| Operations and Maintenance | 525,854     | 675,767     | 828,293     | 935,533     |
| Transportation             | 450,009     | 596,063     | 671,979     | 515,893     |
| Central Facility           | 114,561     | 128,559     | 144,022     | 186,129     |
| Noninstructional Service   | 777,182     | 904,482     | 967,469     | 1,080,901   |
| Facility Construction      | 1,514,881   | 1,671,979   | 1,675,767   | 2,199,396   |
| Debt Service (Principal)   | 50,797      | 60,915      | 73,915      | 95,079      |

## Budget Analysis

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### *Instructions:*

Due to the excellent budgetary skills you received at TSU, while pursuing your MPA degree, a local school district has hired you as a budgeting analyst. The 2002 budget figures (your budget project) suggests that your school district will witness a decrease in school revenues of 12 ½ percent during this fiscal year. You have been asked to advise the local school board on budgetary decisions that would maximize the fiscal resources available for the 2002-03 budgetary school year, along with possible recommendations for raising additional revenue to assist in covering the cost of education. What recommendations would you make to the board in the context of the following budgetary dilemmas?

### **Revenue Dilemmas: Possible sources of additional revenue**

Taxing Options: Which avenues of revenue generating should your school district pursue and why?

Local Sales Tax

Property Tax

User Fees

Bonds

Investing

Grants

Gaming Revenues

Other Taxes or revenue generating devices that will bring in more revenue

### **Expenditure Dilemmas: Entitlement expenditures versus discretionary spending**

Teacher's Union is calling for higher salaries & benefits

Debt - A bond the school district issued seven years ago will be maturing soon.

Transportation Purchases – New Buses are needed

Computer Purchases – New computers are needed

Operating Costs – Adjustment for 3% increase in inflation

Instructional Costs – Need five additional teachers to meet the 20:1 student/teacher ratio quota.

Facility Reconstruction – Need to make accommodations for ADA

Litigation costs – possible costs if the interest groups and unions sue.

Fund Balance/Rainey Day Fund Account Balance – How much?

### **Political Dilemmas: The Political context in which the school board operates**

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- The political ideologies of the school board members are as follows: 3 Republicans, 3 Democrats, and 1 independent.
- The Republicans are endorsing more contracting out of school services because they receive political support from the local merchants.

- The Democrats favor raising taxes for additional revenue because they receive support from the local teachers union and the NAACP.
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- The independent is your swing vote and he supports the Republicans 50% and Democrats 50% of the time.

**Other Dilemmas:**

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- The 2002 school year is an election year for school board members. All are up for re-election.
  - The school board raised property taxes in 2000 by 10 mills.
  - The state issued an increase of 1 percent to the state sales tax starting in 2000.
  - The school district that employed you recently settled out of court with the local teachers union on raising teacher's salaries to meet the states average salary of comparable school districts.
  - The NAACP is threatening a lawsuit if two of the inner-city schools are not renovated to the standards equivalent of the two predominantly white suburban schools located in your school district.
  - In 2002, the school district must begin paying dividends on the bond they passed in 1998 for a new suburban high school.
  - In 1998, the school district signed a contract with Dell Computers indicating that they would purchase 50 new computers every four years in an effort to keep the learning environment in the classroom updated with the newest technology.
  - Many of the materials used by your school district is purchased from local merchants however, a recent article was published in *Public Budgeting and Finance* recognizing that in almost every state, local merchants are over charging school districts on daily operational materials. Which you found to be the case in your school district.
  - With all of these dilemmas facing you as a budget analyst what are your recommendations and why?
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*Technical Format:*

The analysis should be 7-10 pages in length and should address all the various dilemmas facing the school district. All papers should use the following technical format: Times New Roman, 12 point font, 1" margins from left to right and top to bottom, and double space each line in the paper. Submit two copies of your analysis and I will return one copy with your grade.

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