

# Analytical Procedure Worksheet

Report prepared for: Sample S20

	12/31/2011	12/31/2012	Actual 12/31/2013	Expected 12/31/2013	% Diff	Comments
<b>Statement of Activities</b>						
Program Service Revenue	\$0	\$0	\$0	\$0	0%	
Contributions	\$959,577	\$887,059	\$897,509	\$814,541	10%	
Government Grants	\$0	\$0	\$0	\$0	0%	
Investment Revenue	\$2,101	\$536	\$209	\$268	-22%	
Royalties	\$2,101	\$0	\$0	\$0	0%	
Membership Dues	\$0	\$0	\$0	\$0	0%	
Other Operating Revenue	\$0	\$101,689	\$60,181	\$203,378	-70%	
Net Assets Released From Restrictions	\$0	\$0	\$0	\$0	0%	
Total Unrestricted Revenue	\$961,678	\$989,284	\$957,899	\$1,018,187	-6%	
Program Service Expenses	\$743,038	\$1,032,525	\$879,637	\$979,894	-10%	
Rent	\$6,383	\$3,150	\$5,400	\$1,621	233%	
Payroll & Benefits	\$263,035	\$237,128	\$288,596	\$209,621	38%	
Utilities	\$0	\$0	\$0	\$0	0%	
Depreciation and Amortization	\$0	\$0	\$0	\$0	0%	
Interest Expense	\$0	\$0	\$0	\$0	0%	
benefits	\$13,887	\$18,313	\$22,499	\$22,993	-2%	
payroll taxes	\$9,395	\$15,159	\$18,253	\$21,257	-14%	
director payroll	\$39,697	\$46,000	\$46,002	\$52,658	-13%	
Gross Yield	\$218,640	(\$43,241)	\$78,262	\$38,293	104%	
Gross Program Margin	22.74%	-4.37%	8.17%	3.76%	117%	
Fundraising Expenses	\$43,852	\$58,389	\$56,977	\$96,196	-41%	
Payroll & Benefits	\$0	\$40,000	\$40,000	\$80,000	-50%	
Rent	\$0	\$0	\$0	\$0	0%	
Utilities	\$0	\$0	\$0	\$0	0%	
Depreciation and Amortization	\$0	\$0	\$0	\$0	0%	
Interest Expense	\$0	\$0	\$0	\$0	0%	
benefits	\$0	\$0	\$307	\$0	N/A	
payroll taxes	\$0	\$3,060	\$3,060	\$6,120	-50%	
director payroll	\$9,924	\$10,000	\$9,999	\$10,076	-1%	
Administration Expenses	\$80,531	\$78,675	\$104,984	\$76,819	37%	
Rent	\$4,327	\$7,574	\$10,483	\$10,821	-3%	
Payroll & Benefits	\$40,439	\$39,283	\$63,148	\$38,127	66%	
Utilities	\$0	\$0	\$0	\$0	0%	
Depreciation and Amortization	\$0	\$0	\$0	\$0	0%	
Interest Expense	\$0	\$0	\$0	\$0	0%	
benefits	\$0	\$0	\$307	\$0	N/A	
payroll taxes	\$3,093	\$6,402	\$4,066	\$9,711	-58%	
Other Operating Expenses	\$0	\$0	\$0	\$0	0%	
Rent	\$0	\$0	\$0	\$0	0%	
Payroll & Benefits	\$0	\$0	\$0	\$0	0%	
Utilities	\$0	\$0	\$0	\$0	0%	
Depreciation and Amortization	\$0	\$0	\$0	\$0	0%	
Interest Expense	\$0	\$0	\$0	\$0	0%	
Total Operating Expenses	\$867,421	\$1,169,589	\$1,041,598	\$1,152,909	-10%	
Operating Yield (Net Operating Gain/Loss)	\$94,257	(\$180,305)	(\$83,699)	(\$134,722)	38%	
Operating Margin	9.80%	-18.23%	-8.74%	-13.23%	34%	
Other Inflows	\$0	\$0	\$0	\$0	0%	

Other Outflows	\$0	\$0	\$0	\$0	0%
Total Change In Net Assets	\$94,257	(\$180,305)	(\$83,699)	(\$134,722)	38%

	12/31/2011	12/31/2012	Actual 12/31/2013	Expected 12/31/2013	% Diff	Comments
<b>Statement of Financial Position</b>						
Total Cash and Cash Equivalents	\$284,621	\$210,005	\$280,421	\$85,103	230%	
Unrestricted Cash	\$43,120	\$99,712	\$150,303	\$40,408	272%	
Unrestricted Cash	\$0	\$0	\$0	\$0	0%	
Restricted Cash	\$0	\$0	\$0	\$0	0%	
Restricted Cash	\$241,501	\$110,293	\$130,118	\$44,695	191%	
Total Receivables	\$2,001	\$620	\$2,472	\$319	675%	
Contributions Receivable	\$300	\$50	\$200	\$26	669%	
Contributions Receivable	\$0	\$0	\$0	\$0	0%	
Accounts Receivable	\$0	\$0	\$0	\$0	0%	
Other Receivables	\$0	\$0	\$0	\$0	0%	
Accounts Receivable	\$0	\$0	\$0	\$0	0%	
Other Receivables	\$0	\$0	\$0	\$0	0%	
Inventory	\$0	\$0	\$0	\$0	0%	
Current Investments	\$0	\$0	\$0	\$0	0%	
Other Current Assets	\$0	\$0	\$5,227	\$0	N/A	
Total Current Assets	\$286,622	\$210,625	\$288,120	\$85,422	237%	
Gross Fixed Assets	\$100,000	\$90,000	\$100,000	\$80,000	25%	
Accumulated Depreciation	\$0	\$0	\$0	\$0	0%	
Net Fixed Assets	\$100,000	\$90,000	\$100,000	\$80,000	25%	
Long Term Investment Assets	\$0	\$0	\$0	\$0	0%	
Other Assets	\$0	\$0	\$0	\$0	0%	
Total Assets	\$386,622	\$300,625	\$388,120	\$165,422	135%	
Payables	\$31,673	\$915	\$149	\$434	-66%	
Short Term Debt	\$0	\$0	\$0	\$0	0%	
Notes Payable / Current Portion of Long Term Debt	\$0	\$0	\$0	\$0	0%	
Other Current Liabilities	\$0	\$0	\$0	\$0	0%	
Total Current Liabilities	\$31,673	\$915	\$149	\$434	-66%	
Total Long Term Liabilities	\$0	\$0	\$0	\$0	0%	
Notes Payable / Senior Debt	\$0	\$0	\$0	\$0	0%	
Notes Payable / Senior Debt	\$0	\$0	\$0	\$0	0%	
Notes Payable / Subordinated Debt	\$0	\$0	\$0	\$0	0%	
Other Long Term Liabilities	\$0	\$0	\$0	\$0	0%	
Notes Payable / Subordinated Debt	\$0	\$0	\$0	\$0	0%	
Other Long Term Liabilities	\$0	\$0	\$0	\$0	0%	
Total Liabilities	\$31,673	\$915	\$149	\$434	-66%	
Total Net Assets	\$354,949	\$299,710	\$387,971	\$164,988	135%	
Number of Employees (FTE)	6.0	8.0	10.0	10.0	0%	

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# Expected Values Calculations

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How were the expected values in the Analytical Procedure Worksheet calculated?

## **SECTION 1: DESCRIBE THE ALGORITHMS USED TO CALCULATE EXPECTED VALUES**

Each expected value found in this report is calculated using one of the following methods: Direct Calculation, Exponential Smoothing, or Adjusted Holt-Winters Exponential Smoothing. In this section, we will provide a general description and example for each of these algorithms to help the reader understand how the calculations work.

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### **Expected Value by Direct Calculation**

Calculated accounts do not need to be predicted separately, because their values are dictated by financial formulas (for example, Gross Yield = Total Unrestricted Revenue - Program Expenses). For these accounts, we simply determine the expected values for each account in the associated formula, and then compute the result of the formula.

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### **Expected Value by Exponential Smoothing**

Exponential smoothing is a forecasting method that relies on a weighted average of historical data values, with the more recent values carrying more weight. The following variables are used in this calculation:

#### **Variables**

alpha: weight to place on previously predicted values ( $0 < \alpha < 1$ )

(1-alpha): weight to place on the most recent actual value

$f_t$  = forecast at time t for the period t+1

$X_t$  = actual value at time t

The Exponential Smoothing Algorithm is computed as follows:

#### **Calculation**

##### **Step 1: Initialize $f_1$ using oldest historical data**

$$f_1 = X_1$$

##### **Step 2: Iteratively calculate $f_t$ from historical data**

$$f_2 = (\alpha * f_1) + (1-\alpha) * X_2$$

$$f_t = (\alpha * f_{t-1}) + (1-\alpha) * X_t$$

#### **Example**

Suppose we had the following historical data for Gross Program Margin:

Gross Program Margin<sub>2005</sub> = 58% [ $X_3$ ]

Gross Program Margin<sub>2004</sub> = 45% [ $X_2$ ]

Gross Program Margin<sub>2003</sub> = 60% [ $X_1$ ]

For this example, we will let  $\alpha=0.3$

##### **Step 1: Initialize f using oldest historical data**

$$f_1 = X_1$$

$$f_1 = 60\%$$

##### **Step 2: Iteratively calculate f**

$$f_2 = (\alpha * f_1) + (1-\alpha) * X_2$$

$$f_2 = (0.3 * 60) + (1-0.3) * 45 = 49.50$$

$$f_3 = (\alpha * f_2) + (1-\alpha) * X_3$$

$$f_3 = (0.3 * 49.50) + (1-0.3) * 58 = 55.45$$

So, our prediction for Gross Program Margin<sub>2006</sub> would be 55.45%

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### **Expected Value by Adjusted Holt-Winters Exponential Smoothing**

The Adjusted Holt-Winters Exponential Smoothing Algorithm uses weighted historical trending to predict the future values of an account. It is more accurate for accounts that tend to trend in one direction over time. The ProfitCents-modified version of this algorithm looks at the financial data from past years and determines a value to place on the trend itself. For example, if a company's sales rises for 3 consecutive periods, we will weight the trend value more than if sales oscillates over the 3 periods. The following variables are used in this calculation:

#### **Variables**

alpha: weight to place on previously predicted values ( $0 < \alpha < 1$ )

(1-alpha): weight to place on the most recent actual value

beta: weight to place on historical trend ( $0 < \beta < 1$ )

(1-beta): weight to place on most recent trend

tw: weight to place on the *overall* trend

$a_t$  = weighted average component of the forecast at time t for the period t+1

$t_t$  = trend component of the forecast at time t for the period t+1 (expected increase from time t to time t+1)

$f_t = a_t + (t_t * tw)$  = forecast at time t for the period t+1

$X_t$  = actual value at time t

The Adjusted Holt-Winters Exponential Smoothing Algorithm is computed as follows:

**Calculation**

**Step 1: Initialize a, t, and f using oldest historical data**

$$a_2 = X_2$$

$$t_2 = X_2 - X_1$$

$$f_2 = a_2 + (t_2 * tw)$$

**Step 2: Iteratively calculate a, t, and f**

$$a_3 = \alpha * f_2 + (1-\alpha) * X_3$$

$$t_3 = \beta * t_2 + (1-\beta) * (X_3 - a_2)$$

$$f_3 = a_3 + (t_3 * tw)$$

$$a_n = \alpha * f_{n-1} + (1-\alpha) * X_n$$

$$t_n = \beta * t_{n-1} + (1-\beta) * (X_n - a_{n-1})$$

$$f_n = a_n + (t_n * tw)$$

**Example**

Suppose we had the following historical data for Program Service Revenue:

$$\text{Program Service Revenue}_{2005} = \$5,000 [X_3]$$

$$\text{Program Service Revenue}_{2004} = \$2,500 [X_2]$$

$$\text{Program Service Revenue}_{2003} = \$1,000 [X_1]$$

For simplicity, we will let alpha=0.5 and beta=0.5. Since sales rose all three years, we will assign tw to be 1 (its greatest possible value)

**Step 1: Initialize a, t, and f using oldest historical data**

$$a_2 = X_2$$

$$a_2 = \$2,500$$

$$t_2 = X_2 - X_1$$

$$t_2 = \$2,500 - \$1,000 = \$1,500$$

$$f_2 = a_2 + (t_2 * tw)$$

$$f_2 = \$4,000$$

**Step 2: Iteratively calculate a, t, and f**

$$a_3 = \alpha * f_2 + (1-\alpha) * X_3$$

$$a_3 = 0.5 * \$4,000 + 0.5 * \$5,000 = \$4,500$$

$$t_3 = \beta * t_2 + (1-\beta) * (X_3 - a_2)$$

$$t_3 = 0.5 * \$1,500 + 0.5 * (\$5,000 - \$2,500) = \$2,000$$

$$f_3 = a_3 + t_3 * tw$$

$$f_3 = \$4,500 + (\$2,000 * 1) = \$6,500$$

So, our prediction for Program Service Revenue<sub>2006</sub> would be \$6,500

**SECTION 2: SHOW THE CALCULATIONS FOR EACH EXPECTED VALUE**

Now that we have given a brief overview of the algorithms used to calculate expected values, we will show precisely how each value in this report has been calculated. Calculations may vary slightly due to rounding.

**Program Service Revenue**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Program Service Revenue}_{12/31/2012}$$

$$t_2 = \text{Program Service Revenue}_{12/31/2012} - \text{Program Service Revenue}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

**Contributions**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Contributions}_{12/31/2012}$$

$$t_2 = \text{Contributions}_{12/31/2012} - \text{Contributions}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 887,059$$

$$t_2 = 887,059 - 959,577 = -72,518$$

$$f_2 = 887,059 + (-72,518) = 814,541$$

$$\text{Expected Value} = 814,541$$

**Government Grants**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

**Calculation**

$$a_2 = \text{Government Grants}_{12/31/2012}$$

$$t_2 = \text{Government Grants}_{12/31/2012} - \text{Government Grants}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

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### Investment Revenue

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

In this case, the Adjusted Holt-Winters algorithm predicted Investment Revenue would drop below an intuitive value.

Therefore, we have smoothed the Expected Value for Investment Revenue by setting the expected value to half the prior period value.

$$\text{Expected Value} = 0.5 * \text{Investment Revenue}_{12/31/2012}$$

##### Calculation

$$0.5 * 536$$

$$\text{Expected Value} = 268$$

---

### Royalties

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

In this case, the Adjusted Holt-Winters algorithm predicted Royalties would drop below an intuitive value. Therefore, we have smoothed the Expected Value for Royalties by setting the expected value to half the prior period value.

$$\text{Expected Value} = 0.5 * \text{Royalties}_{12/31/2012}$$

##### Calculation

$$0.5 * 0$$

$$\text{Expected Value} = 0.00$$

---

### Other Operating Revenue

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Other Operating Revenue}_{12/31/2012}$$

$$t_2 = \text{Other Operating Revenue}_{12/31/2012} - \text{Other Operating Revenue}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

##### Calculation

$$a_2 = 101,689$$

$$t_2 = 101,689 - 0.00 = 101,689$$

$$f_2 = 101,689 + 101,689 = 203,378$$

$$\text{Expected Value} = 203,378$$

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### Membership Dues

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Membership Dues}_{12/31/2012}$$

$$t_2 = \text{Membership Dues}_{12/31/2012} - \text{Membership Dues}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

##### Calculation

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

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### Net Assets Released From Restrictions

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Net Assets Released From Restrictions}_{12/31/2012}$$

$$t_2 = \text{Net Assets Released From Restrictions}_{12/31/2012} - \text{Net Assets Released From Restrictions}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

##### Calculation

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

---

### Total Unrestricted Revenue

#### Algorithm: Direct Calculation

##### Formula

$$\text{Expected Value} = \text{Program Service Revenue}_{\text{Expected}} + \text{Contributions}_{\text{Expected}} + \text{Government Grants}_{\text{Expected}} + \text{Investment Revenue}_{\text{Expected}} + \text{Other Operating Revenue}_{\text{Expected}} + \text{Net Assets Released From Restrictions}_{\text{Expected}}$$

##### Calculation

$$\text{Expected Value} = 0 + 814,541 + 0 + 268 + 203,378 + 0$$

Expected Value = 1,018,187

---

**Program Service Expenses**  
**Algorithm: Direct Calculation**

**Formula**

Expected Value = Total Unrestricted Revenue<sub>Expected</sub> \* (1- Gross Program Margin<sub>Expected</sub>)

**Calculation**

Expected Value = 1,018,187 \* (1-0.04)

Expected Value = 979,894

---

**Rent**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Rent % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.002 \* 1,018,187

Expected Value = 1,621

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**Payroll & Benefits**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Payroll & Benefits % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.206 \* 1,018,187

Expected Value = 209,621

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**benefits**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = benefits % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.023 \* 1,018,187

Expected Value = 22,993

---

**payroll taxes**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = payroll taxes % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.021 \* 1,018,187

Expected Value = 21,257

---

**director payroll**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = director payroll % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.052 \* 1,018,187

Expected Value = 52,658

---

**Utilities**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Utilities % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.00 \* 1,018,187

Expected Value = 0.00

---

**Depreciation and Amortization**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Depreciation and Amortization % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted

Revenue<sub>Expected</sub>

**Calculation**

Expected Value = 0.00 \* 1,018,187

Expected Value = 0.00

---

**Note: The Expected Value for Depreciation and Amortization % of Total Unrestricted**

**Revenue was calculated using the Adjusted Holt-Winters Algorithm**

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**Interest Expense**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Interest Expense % of Total Unrestricted Revenue<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub>

**Note: The Expected Value for Interest Expense % of Total Unrestricted Revenue was calculated using the Adjusted Holt-Winters Algorithm**

**Calculation**

Expected Value = 0.00 \* 1,018,187

Expected Value = 0.00

---

**Gross Yield**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Total Unrestricted Revenue<sub>Expected</sub> - Program Service Expenses<sub>Expected</sub>

**Calculation**

Expected Value = 1,018,187 - 979,894

Expected Value = 38,293

---

**Gross Program Margin**

**Algorithm: Exponential Smoothing**

**Formula**

$f_1 = \text{Gross Program Margin}_{12/31/2011}$

$f_2 = (\alpha * f_1) + (1 - \alpha) * \text{Gross Program Margin}_{12/31/2012}$

Expected Value =  $f_2$

**Calculation**

$f_1 = 0.23$

$f_2 = (0.30 * 0.227) + (1 - 0.30) * (-0.04) = 0.038$

Expected Value = 3.76 %

---

**Fundraising Expenses**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

In order to maintain a proper relationship between Fundraising Expenses and its subaccounts, we have recalculated Fundraising Expenses to equal the sum of the subaccounts

Expected Value = Sum of the subaccounts for Fundraising Expenses

**Calculation**

Expected Value = 96,196

---

**Payroll & Benefits**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$a_2 = \text{Payroll \& Benefits}_{12/31/2012}$

$t_2 = \text{Payroll \& Benefits}_{12/31/2012} - \text{Payroll \& Benefits}_{12/31/2011}$

$f_2 = a_2 + t_2$

Expected Value =  $f_2$

**Calculation**

$a_2 = 40,000$

$t_2 = 40,000 - 0.00 = 40,000$

$f_2 = 40,000 + 40,000 = 80,000$

Expected Value = 80,000

---

**benefits**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$a_2 = \text{benefits}_{12/31/2012}$

$t_2 = \text{benefits}_{12/31/2012} - \text{benefits}_{12/31/2011}$

$f_2 = a_2 + t_2$

Expected Value =  $f_2$

**Calculation**

$a_2 = 0.00$

$t_2 = 0.00 - 0.00 = 0.00$

$f_2 = 0.00 + 0.00 = 0.00$

Expected Value = 0.00

---

**payroll taxes**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$a_2 = \text{payroll taxes}_{12/31/2012}$

$t_2 = \text{payroll taxes}_{12/31/2012} - \text{payroll taxes}_{12/31/2011}$

$f_2 = a_2 + t_2$

**Calculation**

$a_2 = 3,060$

$t_2 = 3,060 - 0.00 = 3,060$

$f_2 = 3,060 + 3,060 = 6,120$

Expected Value =  $f_2$

Expected Value = 6,120

---

**director payroll**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{director payroll}_{12/31/2012}$$

$$t_2 = \text{director payroll}_{12/31/2012} - \text{director payroll}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 10,000$$

$$t_2 = 10,000 - 9,924 = 76$$

$$f_2 = 10,000 + 76 = 10,076$$

Expected Value = 10,076

---

**Rent**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Rent}_{12/31/2012}$$

$$t_2 = \text{Rent}_{12/31/2012} - \text{Rent}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Utilities**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Utilities}_{12/31/2012}$$

$$t_2 = \text{Utilities}_{12/31/2012} - \text{Utilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Depreciation and Amortization**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Depreciation and Amortization}_{12/31/2012}$$

$$t_2 = \text{Depreciation and Amortization}_{12/31/2012} - \text{Depreciation and Amortization}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Interest Expense**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Interest Expense}_{12/31/2012}$$

$$t_2 = \text{Interest Expense}_{12/31/2012} - \text{Interest Expense}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Administration Expenses**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Administration Expenses}_{12/31/2012}$$

$$t_2 = \text{Administration Expenses}_{12/31/2012} - \text{Administration Expenses}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 78,675$$

$$t_2 = 78,675 - 80,531 = -1,856$$

$$f_2 = 78,675 + (-1,856) = 76,819$$

Expected Value = 76,819



---

**Rent****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Rent}_{12/31/2012}$$

$$t_2 = \text{Rent}_{12/31/2012} - \text{Rent}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 7,574$$

$$t_2 = 7,574 - 4,327 = 3,247$$

$$f_2 = 7,574 + 3,247 = 10,821$$

$$\text{Expected Value} = 10,821$$

---

**Payroll & Benefits****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Payroll \& Benefits}_{12/31/2012}$$

$$t_2 = \text{Payroll \& Benefits}_{12/31/2012} - \text{Payroll \& Benefits}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 39,283$$

$$t_2 = 39,283 - 40,439 = -1,156$$

$$f_2 = 39,283 + (-1,156) = 38,127$$

$$\text{Expected Value} = 38,127$$

---

**benefits****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{benefits}_{12/31/2012}$$

$$t_2 = \text{benefits}_{12/31/2012} - \text{benefits}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

---

**payroll taxes****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{payroll taxes}_{12/31/2012}$$

$$t_2 = \text{payroll taxes}_{12/31/2012} - \text{payroll taxes}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 6,402$$

$$t_2 = 6,402 - 3,093 = 3,309$$

$$f_2 = 6,402 + 3,309 = 9,711$$

$$\text{Expected Value} = 9,711$$

---

**Utilities****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Utilities}_{12/31/2012}$$

$$t_2 = \text{Utilities}_{12/31/2012} - \text{Utilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

---

**Depreciation and Amortization****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Depreciation and Amortization}_{12/31/2012}$$

$$t_2 = \text{Depreciation and Amortization}_{12/31/2012} - \text{Depreciation and Amortization}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

---

**Interest Expense****Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Interest Expense}_{12/31/2012}$$

$$t_2 = \text{Interest Expense}_{12/31/2012} - \text{Interest Expense}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

**Depreciation Percent****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Depreciation Percent}_{12/31/2012}$$

$$t_2 = \text{Depreciation Percent}_{12/31/2012} - \text{Depreciation Percent}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

**Total Depreciation and Amortization****Algorithm: Direct Calculation****Formula**

$$\text{Expected Value} = \text{Depreciation Percent}_{\text{Expected}} * \text{Gross Fixed Assets}_{\text{Expected}}$$

**Calculation**

$$\text{Expected Value} = 0 * 80,000$$

$$\text{Expected Value} = 0.00$$

**Other Operating Expenses****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

In order to maintain a proper relationship between Other Operating Expenses and its subaccounts, we have recalculated Other Operating Expenses to equal the sum of the subaccounts

$$\text{Expected Value} = \text{Sum of the subaccounts for Other Operating Expenses}$$

**Calculation**

$$\text{Expected Value} = 0.00$$

**Rent****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Rent}_{12/31/2012}$$

$$t_2 = \text{Rent}_{12/31/2012} - \text{Rent}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

**Payroll & Benefits****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Payroll \& Benefits}_{12/31/2012}$$

$$t_2 = \text{Payroll \& Benefits}_{12/31/2012} - \text{Payroll \& Benefits}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

**Utilities****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Utilities}_{12/31/2012}$$

$$t_2 = \text{Utilities}_{12/31/2012} - \text{Utilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value =  $f_2$

Expected Value = 0.00

---

### Depreciation and Amortization

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$a_2 = \text{Depreciation and Amortization}_{12/31/2012}$

$t_2 = \text{Depreciation and Amortization}_{12/31/2012} - \text{Depreciation and Amortization}_{12/31/2011}$

$f_2 = a_2 + t_2$

##### Calculation

$a_2 = 0.00$

$t_2 = 0.00 - 0.00 = 0.00$

$f_2 = 0.00 + 0.00 = 0.00$

Expected Value =  $f_2$

Expected Value = 0.00

---

### Interest Expense

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$a_2 = \text{Interest Expense}_{12/31/2012}$

$t_2 = \text{Interest Expense}_{12/31/2012} - \text{Interest Expense}_{12/31/2011}$

$f_2 = a_2 + t_2$

##### Calculation

$a_2 = 0.00$

$t_2 = 0.00 - 0.00 = 0.00$

$f_2 = 0.00 + 0.00 = 0.00$

Expected Value =  $f_2$

Expected Value = 0.00

---

### Total Operating Expenses

#### Algorithm: Direct Calculation

##### Formula

Expected Value = Program Service Expenses<sub>Expected</sub> + Fundraising Expenses<sub>Expected</sub> + Administration Expenses<sub>Expected</sub> +  
Other Operating Expenses<sub>Expected</sub>

##### Calculation

Expected Value = 979,894 + 96,196 +  
76,819 + 0

Expected Value = 1,152,909

---

### Operating Yield (Net Operating Gain/Loss)

#### Algorithm: Direct Calculation

##### Formula

Expected Value = Gross Yield<sub>Expected</sub> - Fundraising Expenses<sub>Expected</sub> - Administration Expenses<sub>Expected</sub> - Other Operating  
Expenses<sub>Expected</sub>

##### Calculation

Expected Value = 38,293 - 96,196 - 76,819  
- 0

Expected Value = -134,722

---

### Operating Margin

#### Algorithm: Direct Calculation

##### Formula

Expected Value = Operating Yield<sub>Expected</sub> / Total Unrestricted Revenue<sub>Expected</sub>

##### Calculation

Expected Value = -134,722 / 1,018,187

Expected Value = -13.23 %

---

### Other Inflows

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$a_2 = \text{Other Inflows}_{12/31/2012}$

$t_2 = \text{Other Inflows}_{12/31/2012} - \text{Other Inflows}_{12/31/2011}$

$f_2 = a_2 + t_2$

##### Calculation

$a_2 = 0.00$

$t_2 = 0.00 - 0.00 = 0.00$

$f_2 = 0.00 + 0.00 = 0.00$

Expected Value =  $f_2$

Expected Value = 0.00

---

### Other Outflows

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$a_2 = \text{Other Outflows}_{12/31/2012}$

$t_2 = \text{Other Outflows}_{12/31/2012} - \text{Other Outflows}_{12/31/2011}$

$f_2 = a_2 + t_2$

##### Calculation

$a_2 = 0.00$

$t_2 = 0.00 - 0.00 = 0.00$

$f_2 = 0.00 + 0.00 = 0.00$

Expected Value =  $f_2$

Expected Value = 0.00

---

**Total Change In Net Assets****Algorithm: Direct Calculation****Formula**

Expected Value = Operating Yield<sub>Expected</sub> + Other Inflows<sub>Expected</sub> - Other Outflows<sub>Expected</sub>

**Calculation**

Expected Value = -134,722 + 0 - 0

Expected Value = -134,722

---

**Total Cash and Cash Equivalents****Algorithm: Direct Calculation****Formula**

Expected Value = Cash<sub>12/31/2012</sub>

+ Total Change In Net Assets<sub>Expected</sub> -  $\Delta$ TotalReceivables<sub>Expected</sub>

-  $\Delta$ Inventory<sub>Expected</sub> -  $\Delta$ Other Current Assets<sub>Expected</sub>

-  $\Delta$ Investment Assets<sub>Expected</sub> -  $\Delta$ Other Assets<sub>Expected</sub>

-  $\Delta$ Gross Fixed Assets<sub>Expected</sub> + Total Depreciation<sub>Expected</sub>

+  $\Delta$ Payables<sub>Expected</sub> +  $\Delta$ Short Term Debt<sub>Expected</sub>

+  $\Delta$ Notes Payable / Current Portion of Long Term Debt<sub>Expected</sub>

+  $\Delta$ Other Current Liabilities<sub>Expected</sub>

+  $\Delta$ Total Long Term Liabilities<sub>Expected</sub>

**Calculation**

Expected Value = 210,005

+ (-134,722) - (-301)

- 0 - 0

- 0 - 0

- (-10,000) + 0

+ (-481) + 0

+ 0

+ 0

+ 0

Expected Value = 85,103

---

**Unrestricted Cash****Algorithm: Percent of Parent****Formula**

Expected Value = Unrestricted Cash<sub>12/31/2012</sub> / Cash<sub>12/31/2012</sub> \* Cash<sub>Expected</sub>

**Calculation**

Expected Value = 99,712 / 210,005 \*

85,103

Expected Value = 40,408

---

**Restricted Cash****Algorithm: Percent of Parent****Formula**

Expected Value = Restricted Cash<sub>12/31/2012</sub> / Cash<sub>12/31/2012</sub> \* Cash<sub>Expected</sub>

**Calculation**

Expected Value = 110,293 / 210,005 \*

85,103

Expected Value = 44,695

---

**Unrestricted Cash****Algorithm: Percent of Parent****Formula**

Expected Value = Unrestricted Cash<sub>12/31/2012</sub> / Cash<sub>12/31/2012</sub> \* Cash<sub>Expected</sub>

**Calculation**

Expected Value = 0 / 210,005 \* 85,103

Expected Value = 0.00

---

**Restricted Cash****Algorithm: Percent of Parent****Formula**

Expected Value = Restricted Cash<sub>12/31/2012</sub> / Cash<sub>12/31/2012</sub> \* Cash<sub>Expected</sub>

**Calculation**

Expected Value = 0 / 210,005 \* 85,103

Expected Value = 0.00

---

**Total Receivables****Algorithm: Direct Calculation****Formula**

if ((Receivable Days<sub>Expected</sub> < 0) And (Total Unrestricted Revenue<sub>Expected</sub>  $\neq$  0))

Expected Value = (Receivable Days<sub>Expected</sub> \* |Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) / 365

else if (Total Unrestricted Revenue<sub>Expected</sub> <= 0)

Expected Value = Receivable Days<sub>Expected</sub>

else

Expected Value = (Receivable Days<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) / 365

**Calculation**

if ((0.11 < 0) And (1,018,187  $\neq$  0))

Expected Value = (0.11 \* |1,018,187.00| \* 1.00) / 365

else if (1,018,187 <= 0)

Expected Value = 0.11

else

---

Expected Value =  $(0.11 * 1,018,187 * 1.00)$   
/ 365

Expected Value = 319

---

### Contributions Receivable

#### Algorithm: Direct Calculation

##### Formula

if  $((\text{Contributions Receivable Days}_{\text{Expected}} < 0) \text{ And } (\text{Total Unrestricted Revenue}_{\text{Expected}} \neq 0))$   
Expected Value =  $(\text{Contributions Receivable Days}_{\text{Expected}} * |\text{Total Unrestricted Revenue}_{\text{Expected}}| * \text{Annualization Factor}) /$   
365

else if  $(\text{Total Unrestricted Revenue}_{\text{Expected}} \leq 0)$

Expected Value = Contributions Receivable Days<sub>Expected</sub>

else

Expected Value =  $(\text{Contributions Receivable Days}_{\text{Expected}} * \text{Total Unrestricted Revenue}_{\text{Expected}} * \text{Annualization Factor}) /$   
365

**Note: The Expected Value for Contributions Receivable Days was calculated using the same method as TotalReceivables Days.**

##### Calculation

if  $((0.009 < 0) \text{ And } (1,018,187 \neq 0))$

Expected Value =  $(0.009 * |1,018,187.00| * 1.00) / 365$

else if  $(1,018,187 \leq 0)$

Expected Value = 0.009

else

Expected Value =  $(0.009 * 1,018,187 * 1.00) / 365$

Expected Value = 26

---

### Accounts Receivable

#### Algorithm: Direct Calculation

##### Formula

if  $((\text{Accounts Receivable Days}_{\text{Expected}} < 0) \text{ And } (\text{Total Unrestricted Revenue}_{\text{Expected}} \neq 0))$   
Expected Value =  $(\text{Accounts Receivable Days}_{\text{Expected}} * |\text{Total Unrestricted Revenue}_{\text{Expected}}| * \text{Annualization Factor}) / 365$

else if  $(\text{Total Unrestricted Revenue}_{\text{Expected}} \leq 0)$

Expected Value = Accounts Receivable Days<sub>Expected</sub>

else

Expected Value =  $(\text{Accounts Receivable Days}_{\text{Expected}} * \text{Total Unrestricted Revenue}_{\text{Expected}} * \text{Annualization Factor}) / 365$

**Note: The Expected Value for Accounts Receivable Days was calculated using the same method as TotalReceivables Days.**

##### Calculation

if  $((0.00 < 0) \text{ And } (1,018,187 \neq 0))$

Expected Value =  $(0.00 * |1,018,187.00| * 1.00) / 365$

else if  $(1,018,187 \leq 0)$

Expected Value = 0.00

else

Expected Value =  $(0.00 * 1,018,187 * 1.00) / 365$

Expected Value = 0.00

---

### Other Receivables

#### Algorithm: Direct Calculation

##### Formula

if  $((\text{Other Receivables Days}_{\text{Expected}} < 0) \text{ And } (\text{Total Unrestricted Revenue}_{\text{Expected}} \neq 0))$   
Expected Value =  $(\text{Other Receivables Days}_{\text{Expected}} * |\text{Total Unrestricted Revenue}_{\text{Expected}}| * \text{Annualization Factor}) / 365$

else if  $(\text{Total Unrestricted Revenue}_{\text{Expected}} \leq 0)$

Expected Value = Other Receivables Days<sub>Expected</sub>

else

Expected Value =  $(\text{Other Receivables Days}_{\text{Expected}} * \text{Total Unrestricted Revenue}_{\text{Expected}} * \text{Annualization Factor}) / 365$

**Note: The Expected Value for Other Receivables Days was calculated using the same method as TotalReceivables Days.**

##### Calculation

if  $((0.00 < 0) \text{ And } (1,018,187 \neq 0))$

Expected Value =  $(0.00 * |1,018,187.00| * 1.00) / 365$

else if  $(1,018,187 \leq 0)$

Expected Value = 0.00

else

Expected Value =  $(0.00 * 1,018,187 * 1.00) / 365$

Expected Value = 0.00

---

### Contributions Receivable

#### Algorithm: Direct Calculation

##### Formula

if ((Contributions Receivable Days<sub>Expected</sub> < 0) And (Total Unrestricted Revenue<sub>Expected</sub>  $\neq$  0))  
Expected Value = (Contributions Receivable Days<sub>Expected</sub> \* |Total Unrestricted Revenue<sub>Expected</sub>| \* Annualization Factor) /  
365  
else if (Total Unrestricted Revenue<sub>Expected</sub>  $\leq$  0)  
Expected Value = Contributions Receivable Days<sub>Expected</sub>  
else  
Expected Value = (Contributions Receivable Days<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) /  
365

##### Calculation

if ((0.00 < 0) And (1,018,187  $\neq$  0))  
Expected Value = (0.00 \* |1,018,187.00| \*  
1.00) / 365  
else if (1,018,187  $\leq$  0)  
Expected Value = 0.00  
else  
Expected Value = (0.00 \* 1,018,187 \* 1.00)  
/ 365

**Note: The Expected Value for Contributions Receivable Days was calculated using the same method as TotalReceivables Days.**

Expected Value = 0.00

---

### Accounts Receivable

#### Algorithm: Direct Calculation

##### Formula

if ((Accounts Receivable Days<sub>Expected</sub> < 0) And (Total Unrestricted Revenue<sub>Expected</sub>  $\neq$  0))  
Expected Value = (Accounts Receivable Days<sub>Expected</sub> \* |Total Unrestricted Revenue<sub>Expected</sub>| \* Annualization Factor) / 365  
else if (Total Unrestricted Revenue<sub>Expected</sub>  $\leq$  0)  
Expected Value = Accounts Receivable Days<sub>Expected</sub>  
else  
Expected Value = (Accounts Receivable Days<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) / 365

##### Calculation

if ((0.00 < 0) And (1,018,187  $\neq$  0))  
Expected Value = (0.00 \* |1,018,187.00| \*  
1.00) / 365  
else if (1,018,187  $\leq$  0)  
Expected Value = 0.00  
else  
Expected Value = (0.00 \* 1,018,187 \* 1.00)  
/ 365

**Note: The Expected Value for Accounts Receivable Days was calculated using the same method as TotalReceivables Days.**

Expected Value = 0.00

---

### Other Receivables

#### Algorithm: Direct Calculation

##### Formula

if ((Other Receivables Days<sub>Expected</sub> < 0) And (Total Unrestricted Revenue<sub>Expected</sub>  $\neq$  0))  
Expected Value = (Other Receivables Days<sub>Expected</sub> \* |Total Unrestricted Revenue<sub>Expected</sub>| \* Annualization Factor) / 365  
else if (Total Unrestricted Revenue<sub>Expected</sub>  $\leq$  0)  
Expected Value = Other Receivables Days<sub>Expected</sub>  
else  
Expected Value = (Other Receivables Days<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) / 365

##### Calculation

if ((0.00 < 0) And (1,018,187  $\neq$  0))  
Expected Value = (0.00 \* |1,018,187.00| \*  
1.00) / 365  
else if (1,018,187  $\leq$  0)  
Expected Value = 0.00  
else  
Expected Value = (0.00 \* 1,018,187 \* 1.00)  
/ 365

**Note: The Expected Value for Other Receivables Days was calculated using the same method as TotalReceivables Days.**

Expected Value = 0.00

---

### Receivable Days

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

##### Calculation

In this case, the Adjusted Holt-Winters algorithm predicted Receivable Days would drop below an intuitive value. Therefore, we have smoothed the Expected Value for Receivable Days by setting the expected value to half the prior period value.

$$0.5 * 0.23$$

$$\text{Expected Value} = 0.5 * \text{Receivable Days}_{12/31/2012}$$

$$\text{Expected Value} = 0.114$$

### Inventory

#### Algorithm: Direct Calculation

##### Formula

if ((Inventory Days<sub>Expected</sub> < 0) And (Program Service Expenses<sub>Expected</sub> ≠ 0))

$$\text{Expected Value} = (\text{Inventory Days}_{\text{Expected}} * |\text{Program Service Expenses}_{\text{Expected}}| * \text{Annualization Factor}) / 365$$

else if ((Program Service Expenses<sub>Expected</sub> ≤ 0) And (Total Unrestricted Revenue<sub>Expected</sub> ≤ 0))

$$\text{Expected Value} = \text{Inventory Days}_{\text{Expected}}$$

else if (Program Service Expenses<sub>Expected</sub> > 0)

$$\text{Expected Value} = (\text{Inventory Days}_{\text{Expected}} * \text{Program Service Expenses}_{\text{Expected}} * \text{Annualization Factor}) / 365$$

else

$$\text{Expected Value} = (\text{Inventory Days}_{\text{Expected}} * \text{Total Unrestricted Revenue}_{\text{Expected}} * \text{Annualization Factor}) / 365$$

##### Calculation

if ((0 < 0) And (979,894 ≠ 0))

$$\text{Expected Value} = (0 * |979,894.00| * 1.00) / 365$$

else if ((979,894 ≤ 0) And (1,018,187 ≤ 0))

$$\text{Expected Value} = 0$$

else if (979,894 > 0)

$$\text{Expected Value} = (0 * 979,894 * 1.00) / 365$$

else

$$\text{Expected Value} = (0 * 1,018,187 * 1.00) / 365$$

$$\text{Expected Value} = 0.00$$

### Inventory Days

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Inventory Days}_{12/31/2012}$$

$$t_2 = \text{Inventory Days}_{12/31/2012} - \text{Inventory Days}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

##### Calculation

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

### Other Current Assets

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Other Current Assets}_{12/31/2012}$$

$$t_2 = \text{Other Current Assets}_{12/31/2012} - \text{Other Current Assets}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

$$\text{Expected Value} = f_2$$

##### Calculation

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

$$\text{Expected Value} = 0.00$$

### Total Current Assets

#### Algorithm: Direct Calculation

##### Formula

$$\text{Expected Value} = \text{Total Cash and Cash Equivalents}_{\text{Expected}} + \text{Total Receivables}_{\text{Expected}}$$

$$+ \text{Inventory}_{\text{Expected}} + \text{Other Current Assets}_{\text{Expected}}$$

##### Calculation

$$\text{Expected Value} = 85,103 + 319 + 0 + 0$$

$$\text{Expected Value} = 85,422$$

### Gross Fixed Assets

#### Algorithm: Adjusted Holt-Winters Exponential Smoothing

##### Formula

$$a_2 = \text{Gross Fixed Assets}_{12/31/2012}$$

$$t_2 = \text{Gross Fixed Assets}_{12/31/2012} - \text{Gross Fixed Assets}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

##### Calculation

$$a_2 = 90,000$$

$$t_2 = 90,000 - 100,000 = -10,000$$

$$f_2 = 90,000 + (-10,000) = 80,000$$

Expected Value =  $f_2$

Expected Value = 80,000

**Accumulated Depreciation**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Accumulated Depreciation<sub>12/31/2012</sub> - (Accumulated Depreciation<sub>12/31/2012</sub> \* |(Gross Fixed Assets<sub>Expected</sub> - Gross Fixed Assets<sub>12/31/2012</sub>) / Gross Fixed Assets<sub>12/31/2012</sub>)| + Depreciation Expense<sub>Expected</sub>

**Calculation**

Expected Value = 0 - (0 \* |(80,000 - 90,000) / 90,000|) + 0  
Expected Value = 0.00

**Net Fixed Assets**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Gross Fixed Assets<sub>Expected</sub> - Accumulated Depreciation<sub>Expected</sub>

**Calculation**

Expected Value = 80,000 - 0  
Expected Value = 80,000

**Long Term Investment Assets**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$a_2 = \text{Long Term Investment Assets}_{12/31/2012}$

$t_2 = \text{Long Term Investment Assets}_{12/31/2012} - \text{Long Term Investment Assets}_{12/31/2011}$

$f_2 = a_2 + t_2$

Expected Value =  $f_2$

**Calculation**

$a_2 = 0.00$   
 $t_2 = 0.00 - 0.00 = 0.00$   
 $f_2 = 0.00 + 0.00 = 0.00$

Expected Value = 0.00

**Other Assets**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$a_2 = \text{Other Assets}_{12/31/2012}$

$t_2 = \text{Other Assets}_{12/31/2012} - \text{Other Assets}_{12/31/2011}$

$f_2 = a_2 + t_2$

Expected Value =  $f_2$

**Calculation**

$a_2 = 0.00$   
 $t_2 = 0.00 - 0.00 = 0.00$   
 $f_2 = 0.00 + 0.00 = 0.00$

Expected Value = 0.00

**Total Assets**

**Algorithm: Direct Calculation**

**Formula**

Expected Value = Total Current Assets<sub>Expected</sub> + Net Fixed Assets<sub>Expected</sub> + Investment Assets<sub>Expected</sub> + Other Assets<sub>Expected</sub>

**Calculation**

Expected Value = 85,422 + 80,000 + 0 + 0  
Expected Value = 165,422

**Payables**

**Algorithm: Direct Calculation**

**Formula**

if ((Payable Days<sub>Expected</sub> < 0) And (Program Service Expenses<sub>Expected</sub> != 0))

Expected Value = (Payable Days<sub>Expected</sub> \* |Program Service Expenses<sub>Expected</sub> \* Annualization Factor) / 365

else if ((Program Service Expenses <= 0) And (Total Unrestricted Revenue <= 0))

Expected Value = Payable Days<sub>Expected</sub>

else if (Program Service Expenses > 0)

Expected Value = (Payable Days<sub>Expected</sub> \* Program Service Expenses<sub>Expected</sub> \* Annualization Factor) / 365

else

Expected Value = (Payable Days<sub>Expected</sub> \* Total Unrestricted Revenue<sub>Expected</sub> \* Annualization Factor) / 365

**Calculation**

if ((0.16 < 0) And (979,894 != 0))

Expected Value = (0.16 \* |979,894.00| \* 1.00) / 365

else if ((979,894 <= 0) And (1,018,187 <= 0))

Expected Value = 0.16

else if (979,894 > 0)

Expected Value = (0.16 \* 979,894 \* 1.00) / 365

else

Expected Value = (0.16 \* 1,018,187 \* 1.00)



Expected Value = 434

**Payable Days****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

In this case, the Adjusted Holt-Winters algorithm predicted Payable Days would drop below an intuitive value.

Therefore, we have smoothed the Expected Value for Payable Days by setting the expected value to half the prior period value.

$$\text{Expected Value} = 0.5 * \text{Payable Days}_{12/31/2012}$$
**Calculation**

$$0.5 * 0.32$$

Expected Value = 0.162

**Short Term Debt****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Short Term Debt}_{12/31/2012}$$

$$t_2 = \text{Short Term Debt}_{12/31/2012} - \text{Short Term Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$
Expected Value =  $f_2$ **Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

**Notes Payable / Current Portion of Long Term Debt****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Notes Payable / Current Portion of Long Term Debt}_{12/31/2012}$$

$$t_2 = \text{Notes Payable / Current Portion of Long Term Debt}_{12/31/2012} - \text{Notes Payable / Current Portion of Long Term Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$
Expected Value =  $f_2$ **Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

**Other Current Liabilities****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$$a_2 = \text{Other Current Liabilities}_{12/31/2012}$$

$$t_2 = \text{Other Current Liabilities}_{12/31/2012} - \text{Other Current Liabilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$
Expected Value =  $f_2$ **Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

**Total Current Liabilities****Algorithm: Direct Calculation****Formula**

$$\text{Expected Value} = \text{Payables}_{\text{Expected}} + \text{Short Term Debt}_{\text{Expected}}$$

$$+ \text{Other Current Liabilities}_{\text{Expected}}$$

$$+ \text{Notes Payable / Current Portion of Long Term Debt}_{\text{Expected}}$$
**Calculation**

$$\text{Expected Value} = 434 + 0$$

$$+ 0$$

$$+ 0$$

Expected Value = 434

**Total Long Term Liabilities****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

In order to maintain a proper relationship between Total Long Term Liabilities and its subaccounts, we have recalculated

Total Long Term Liabilities to equal the sum of the subaccounts

**Calculation**

Expected Value = Sum of the subaccounts for Total Long Term Liabilities

Expected Value = 0.00

---

**Notes Payable / Senior Debt**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Notes Payable / Senior Debt}_{12/31/2012}$$

$$t_2 = \text{Notes Payable / Senior Debt}_{12/31/2012} - \text{Notes Payable / Senior Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Notes Payable / Subordinated Debt**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Notes Payable / Subordinated Debt}_{12/31/2012}$$

$$t_2 = \text{Notes Payable / Subordinated Debt}_{12/31/2012} - \text{Notes Payable / Subordinated Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Other Long Term Liabilities**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Other Long Term Liabilities}_{12/31/2012}$$

$$t_2 = \text{Other Long Term Liabilities}_{12/31/2012} - \text{Other Long Term Liabilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Notes Payable / Senior Debt**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Notes Payable / Senior Debt}_{12/31/2012}$$

$$t_2 = \text{Notes Payable / Senior Debt}_{12/31/2012} - \text{Notes Payable / Senior Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Notes Payable / Subordinated Debt**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Notes Payable / Subordinated Debt}_{12/31/2012}$$

$$t_2 = \text{Notes Payable / Subordinated Debt}_{12/31/2012} - \text{Notes Payable / Subordinated Debt}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Other Long Term Liabilities**

**Algorithm: Adjusted Holt-Winters Exponential Smoothing**

**Formula**

$$a_2 = \text{Other Long Term Liabilities}_{12/31/2012}$$

$$t_2 = \text{Other Long Term Liabilities}_{12/31/2012} - \text{Other Long Term Liabilities}_{12/31/2011}$$

$$f_2 = a_2 + t_2$$

Expected Value =  $f_2$

**Calculation**

$$a_2 = 0.00$$

$$t_2 = 0.00 - 0.00 = 0.00$$

$$f_2 = 0.00 + 0.00 = 0.00$$

Expected Value = 0.00

---

**Total Liabilities****Algorithm: Direct Calculation****Formula**

Expected Value = Total Current Liabilities<sub>Expected</sub> + Total Long Term Liabilities<sub>Expected</sub>

**Calculation**

Expected Value = 434 + 0

Expected Value = 434

---

**Total Net Assets****Algorithm: Direct Calculation****Formula**

Expected Value = Total Assets<sub>Expected</sub> - Total Liabilities<sub>Expected</sub>

**Calculation**

Expected Value = 165,422 - 434

Expected Value = 164,988

---

**Number of Employees (FTE)****Algorithm: Adjusted Holt-Winters Exponential Smoothing****Formula**

$a_2 = \text{Number of Employees (FTE)}_{12/31/2012}$

$t_2 = \text{Number of Employees (FTE)}_{12/31/2012} - \text{Number of Employees (FTE)}_{12/31/2011}$

$f_2 = a_2 + t_2$

Expected Value =  $f_2$

**Calculation**

$a_2 = 8.00$

$t_2 = 8.00 - 6.00 = 2.00$

$f_2 = 8.00 + 2.00 = 10$

Expected Value = 10

---

## Common Size Statements

	12/31/2011	12/31/2012	12/31/2013	Industry* (322)
<b>Statement of Activities</b>				
Program Service Revenue	0%	0%	0%	36%
Contributions	100%	90%	94%	25%
Government Grants	0%	0%	0%	23%
Investment Revenue	0%	0%	0%	3%
Royalties	0%	0%	0%	N/A
Membership Dues	0%	0%	0%	0%
Other Operating Revenue	0%	10%	6%	8%
Net Assets Released From Restrictions	0%	0%	0%	4%
Total Unrestricted Revenue	100%	100%	100%	100%
Program Service Expenses	77%	104%	92%	69%
Rent	1%	0%	1%	N/A
Payroll & Benefits	27%	24%	30%	N/A
Utilities	0%	0%	0%	N/A
Depreciation and Amortization	0%	0%	0%	N/A
Interest Expense	0%	0%	0%	N/A
benefits	1%	2%	2%	N/A
payroll taxes	1%	2%	2%	N/A
director payroll	4%	5%	5%	N/A
Gross Yield	23%	-4%	8%	31%
Fundraising Expenses	5%	6%	6%	2%
Payroll & Benefits	0%	4%	4%	N/A
Rent	0%	0%	0%	N/A
Utilities	0%	0%	0%	N/A
Depreciation and Amortization	0%	0%	0%	N/A
Interest Expense	0%	0%	0%	N/A
benefits	0%	0%	0%	N/A
payroll taxes	0%	0%	0%	N/A
director payroll	1%	1%	1%	N/A
Administration Expenses	8%	8%	11%	15%
Rent	0%	1%	1%	N/A
Payroll & Benefits	4%	4%	7%	N/A
Utilities	0%	0%	0%	N/A
Depreciation and Amortization	0%	0%	0%	N/A
Interest Expense	0%	0%	0%	N/A
benefits	0%	0%	0%	N/A
payroll taxes	0%	1%	0%	N/A
Other Operating Expenses	0%	0%	0%	9%
Rent	0%	0%	0%	N/A
Payroll & Benefits	0%	0%	0%	N/A
Utilities	0%	0%	0%	N/A
Depreciation and Amortization	0%	0%	0%	N/A
Interest Expense	0%	0%	0%	N/A
Total Operating Expenses	90%	118%	109%	96%
Operating Yield (Net Operating Gain/Loss)	10%	-18%	-9%	4%
Other Inflows	0%	0%	0%	1%
Other Outflows	0%	0%	0%	1%
Total Change In Net Assets	10%	-18%	-9%	4%
	12/31/2011	12/31/2012	12/31/2013	Industry* (322)
<b>Statement of Financial Position</b>				
Total Cash and Cash Equivalents	74%	70%	72%	20%
Unrestricted Cash	11%	33%	39%	N/A
Unrestricted Cash	0%	0%	0%	N/A
Restricted Cash	0%	0%	0%	N/A
Restricted Cash	62%	37%	34%	N/A

Total Receivables	1%	0%	1%	10%
Contributions Receivable	0%	0%	0%	N/A
Contributions Receivable	0%	0%	0%	N/A
Accounts Receivable	0%	0%	0%	N/A
Other Receivables	0%	0%	0%	N/A
Accounts Receivable	0%	0%	0%	N/A
Other Receivables	0%	0%	0%	N/A
Inventory	0%	0%	0%	1%
Current Investments	0%	0%	0%	0%
Other Current Assets	0%	0%	1%	2%
Total Current Assets	74%	70%	74%	75%
Gross Fixed Assets	26%	30%	26%	25%
Accumulated Depreciation	0%	0%	0%	7%
Net Fixed Assets	26%	30%	26%	19%
Long Term Investment Assets	0%	0%	0%	4%
Other Assets	0%	0%	0%	3%
Total Assets	100%	100%	100%	100%
Payables	8%	0%	0%	8%
Short Term Debt	0%	0%	0%	0%
Notes Payable / Current Portion of Long Term Debt	0%	0%	0%	0%
Other Current Liabilities	0%	0%	0%	11%
Total Current Liabilities	8%	0%	0%	22%
Total Long Term Liabilities	0%	0%	0%	16%
Notes Payable / Senior Debt	0%	0%	0%	N/A
Notes Payable / Senior Debt	0%	0%	0%	N/A
Notes Payable / Subordinated Debt	0%	0%	0%	N/A
Other Long Term Liabilities	0%	0%	0%	N/A
Notes Payable / Subordinated Debt	0%	0%	0%	N/A
Other Long Term Liabilities	0%	0%	0%	N/A
Total Liabilities	8%	0%	0%	38%
Total Net Assets	92%	100%	100%	62%

\*The industry common size figures shown above were taken from all nonprofit organizations with NTEE code S20 for all years in all areas with yearly revenue under \$1 million.

## Financial Score

# Sample S20 Report

Sector: S20 - Community & Neighborhood Development

Revenue: Less than \$1M

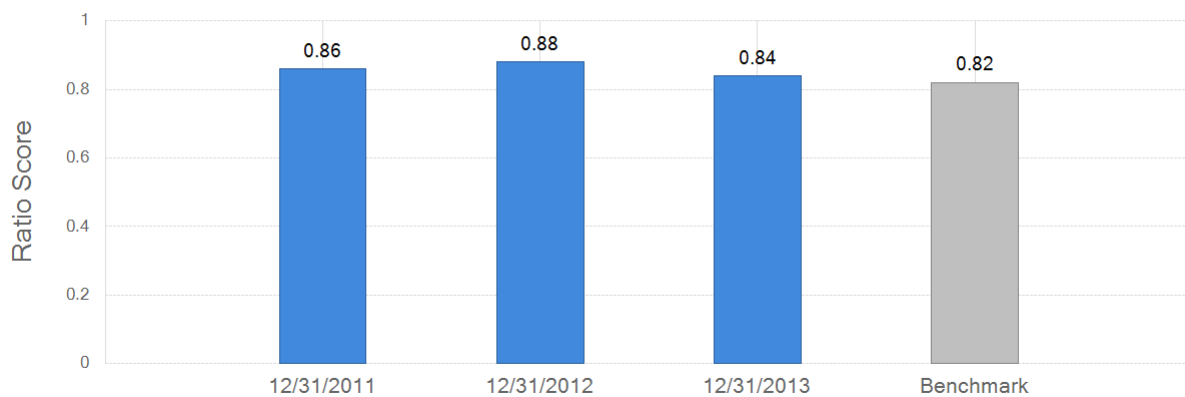
Periods: 12 months against the same 12 months from the previous year

## Nonprofit Operational Analysis ●●●●●

A measure of how well the organization is managing money with regard to its sector and mission.

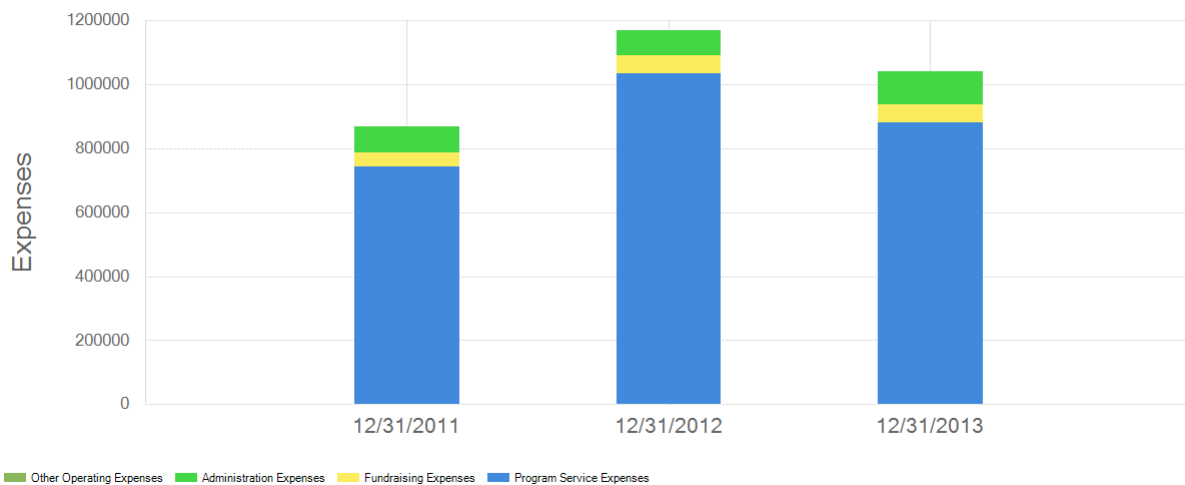
It is good to see that fundraising expenses are generating a strong return, especially since the organization does not seem to have enough program revenue to pay for its total operating costs. Additionally, the organization is generating a low volume of program revenue compared to total revenue, a measure that remained the same from last period. As for program efficiency, the most important metric, the organization is dedicating about the same amount of money to its programs as its peers. Program efficiency is used by people inside and outside of the organization to evaluate its performance.

Program Efficiency = Program Service Expenses / Total Expenses



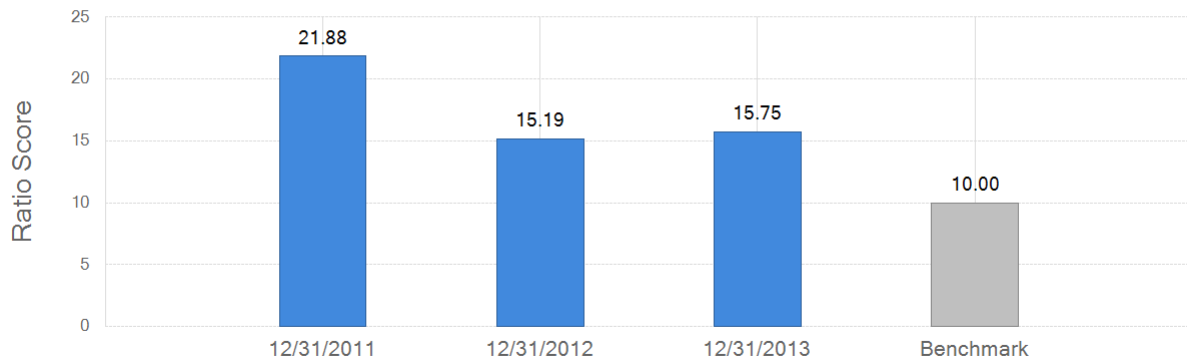
Shows the basic relationship between program expenses and total expenses. The best outcome would be a ratio close to 1, where the majority paid by a nonprofit would go towards "programs". This ratio is typically keenly watched by employees, managers, Board members, donors, and contributors. It tends to be one of the more important metrics that many nonprofits use in assessing performance.

### Expenses Breakdown



This shows the breakdown of all expenses of the nonprofit. In most cases, the majority should go towards Program Service Expenses.

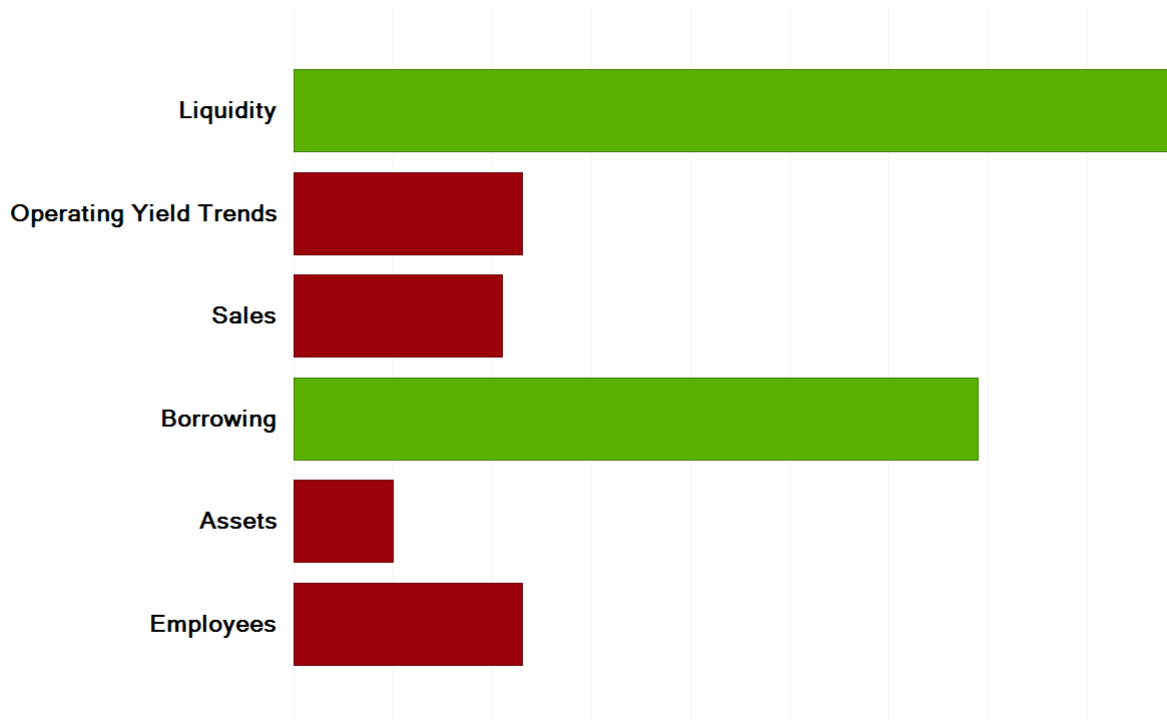
Fundraising Efficiency = Unrestricted Contributions / Unrestricted Fundraising Expenses



Shows how much contribution revenue a nonprofit can generate from fundraising activities/expenses. The ideal relationship is a high number, which would mean that the nonprofit is able to generate a multiple of how much it costs to do fundraising.

---

# Nonprofit Financial Analysis Report Summary



## Liquidity

A measure of the organization's ability to meet obligations as they come due.

Despite lower revenues than last period, the organization has had very positive results in this area. What does this mean? Net income and operating margins are up, and all areas of liquidity look strong at this specific time. Better, all liquidity indicators have risen from last period, as depicted in the graph area of the report. For example, notice in the graph area that the organization's "current" and "quick" ratios are strong **and** have risen. This indicates that both the scope and composition of the liquidity base are sound (as of this **particular** time). Basically, the organization is doing well, even when compared to the competition. When we examine operating yield in a subsequent section, we'll realize even more fully the benefits that a strong liquidity position can yield. If the organization can maintain this strong position over time, management may be able to invest in the expense items that can help propel future operating yield levels. **Present** liquidity should help propel **future** net surpluses.

It's also interesting to note that lower revenue volume has coincided with better liquidity, which is typically true when the organization can still improve net income/profits.

Both the receivable and payable days ratios look low right now, which is important to note here. These ratios are a measure of how quickly the organization is collecting money it is owed and paying its bills/payables. Creditors will generally like to see a lower payable days ratio, as this can be an indicator of the payment strength of the organization.

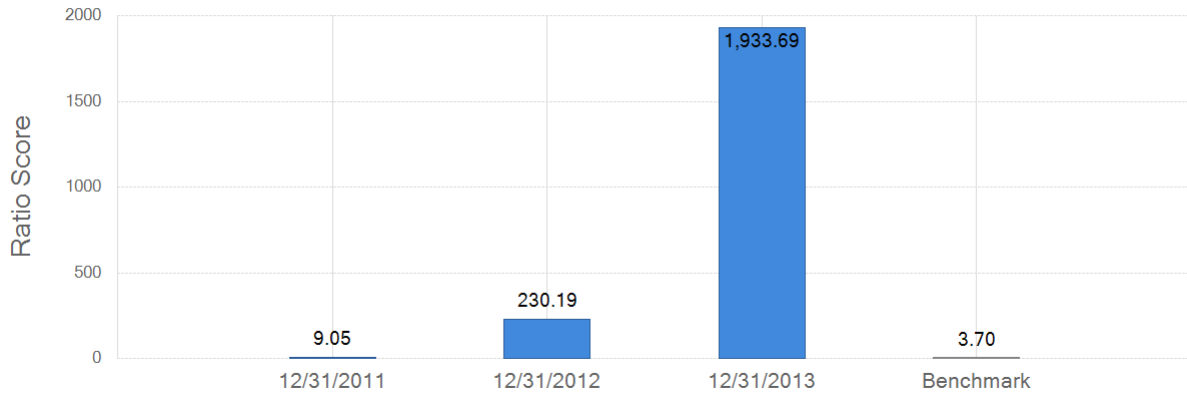
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**LIMITS TO LIQUIDITY ANALYSIS:** Keep in mind that liquidity conditions are volatile, and this is a general analysis looking at a snapshot in time. Review this section, but do not overly rely on it.

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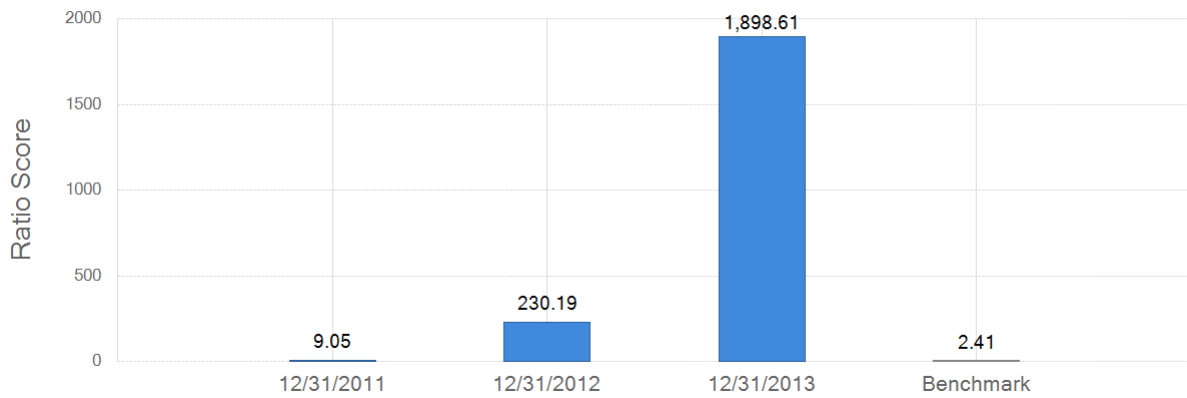


**Current Ratio = Total Current Assets / Total Current Liabilities**



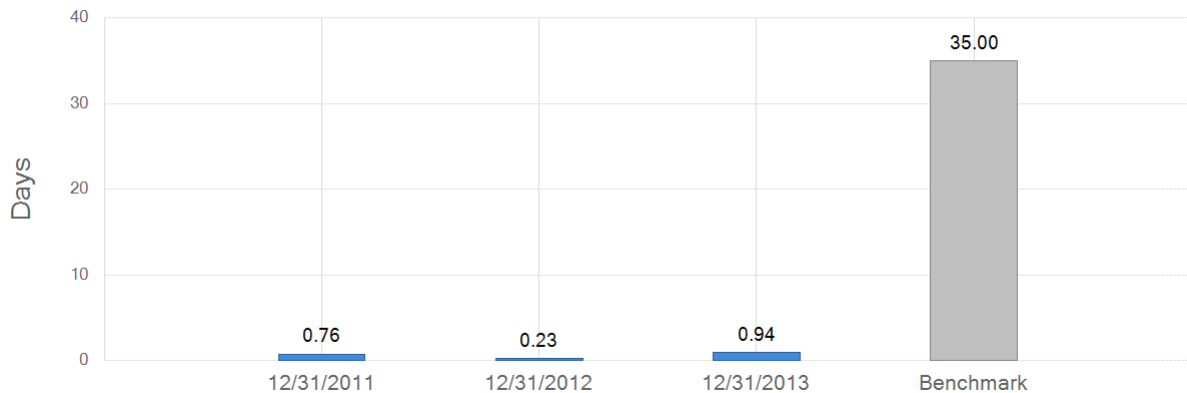
Generally, this metric measures the overall liquidity position of an organization. It is certainly not a perfect barometer, but it is a good one. Watch for big decreases in this number over time. Make sure the accounts listed in "current assets" (numerator) are collectible. The higher the ratio, the more liquid the organization is.

**Quick Ratio = (Cash + Total Receivables) / Total Current Liabilities**



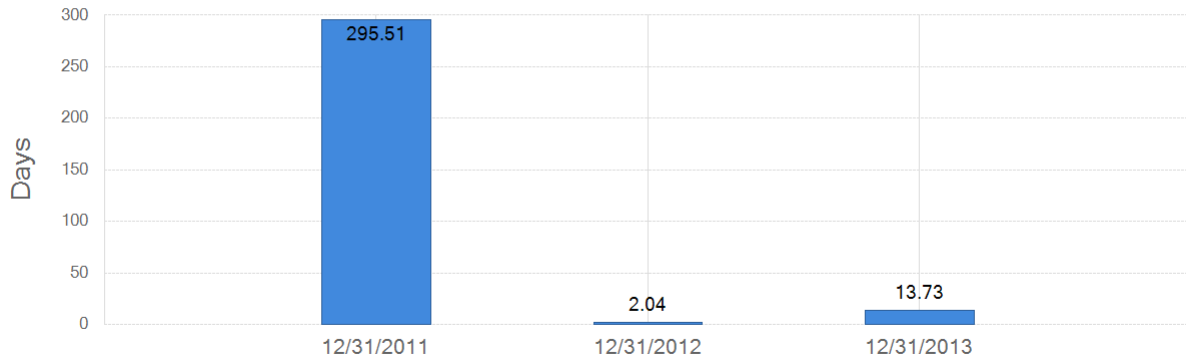
This is another good indicator of liquidity, although by itself, it is not a perfect one. If there are receivable accounts included in the numerator, they should be collectible. Look at the length of time the organization has to pay the amount listed in the denominator (current liabilities). The higher the number, the stronger the organization.

**Receivable Days = (Total Receivables / Total Unrestricted Revenue) \* 365**



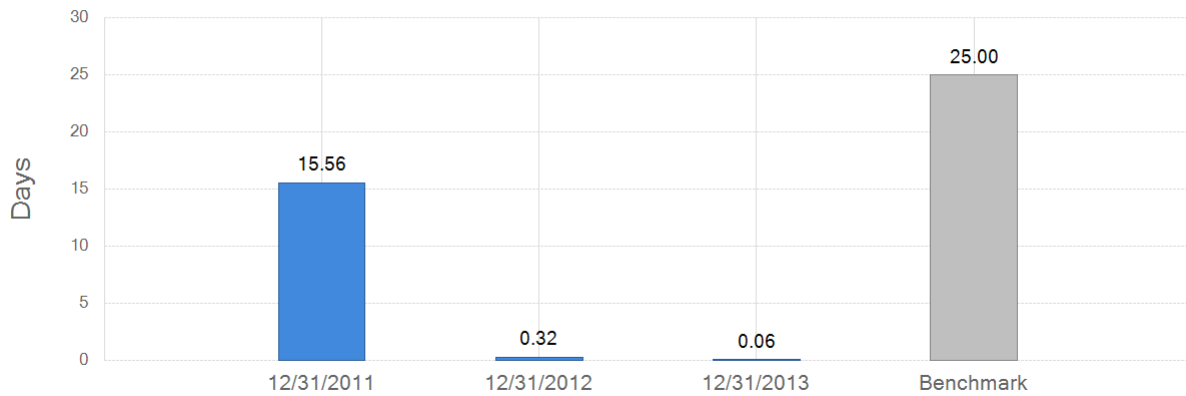
This number reflects the average length of time required to collect cash from receivable accounts such as pledged contributions and/or program services transactions completed using credit. It is crucial to maintaining positive liquidity.

$$\text{Receivable Days Less Contributions} = \frac{(\text{Total Receivables} - \text{Contributions Receivable})}{(\text{Total Unrestricted Revenue} - \text{Contributions})} * 365$$



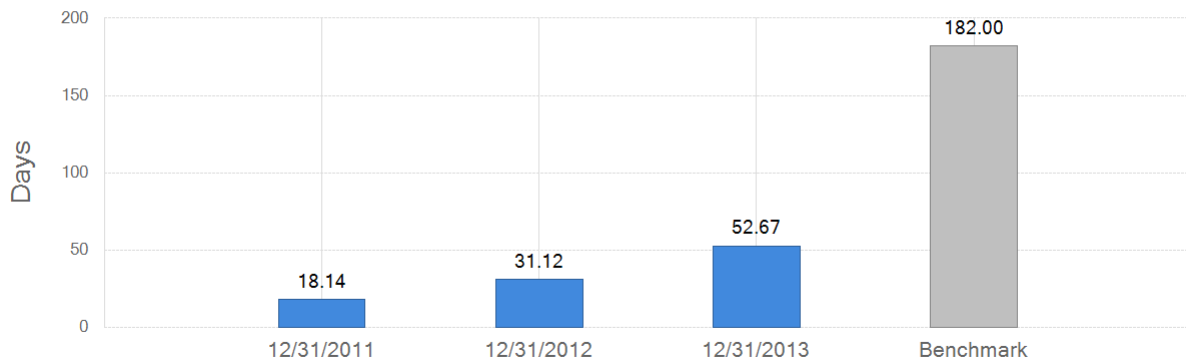
This number reflects the average length of time required to collect cash from all receivable accounts except pledged contributions. It is crucial to maintaining positive liquidity.

$$\text{Payable Days} = \frac{\text{Payables}}{\text{Program Service Expenses}} * 365$$



This ratio shows the average number of days that lapse between the purchase of material and labor, and payment for them. It is a rough measure of how timely an organization is in meeting payment obligations.

$$\text{Days Cash Reserve} = \frac{\text{Unrestricted Cash}}{(\text{Total Expenses} - \text{Depreciation and Amortization})} * 365$$



Cash reserve is a rough measure of the amount of cash on hand to cover future expenses. The organization should target 182 or more days of cash reserve.

## Operating Yield Trends<sup>1</sup>

A measure of whether the trends in profit are favorable for the organization.

Despite a decline in revenues this period, the organization reduced its net loss dollars

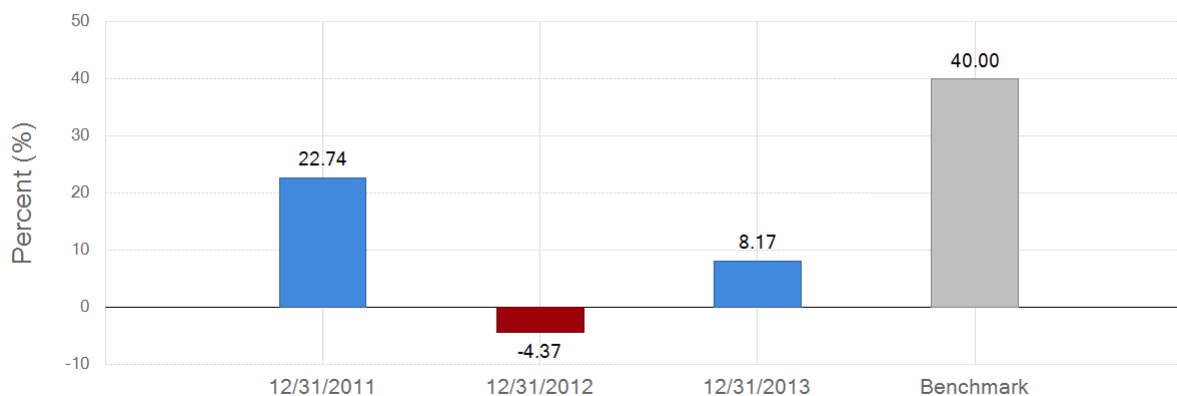
significantly by 53.58%. How was the organization able to achieve a better operating yield on lower volume? It looks as if managers significantly reduced expenses this period, which caused the operating margin to increase by 52.06%. The organization is now paying such a smaller percentage of each revenue dollar out in expenses that it has been able to reduce its deficit with fewer revenue dollars. This is clearly an example of good expense management; the most important time for an organization to control and reduce its expenses is when revenues are falling.

Keep in mind, however, that the organization's operating yield still needs further improvement. The operating margin is weak, both generally and relative to the margins that are being earned by other organizations in this sector; this is highlighted in the graph area of the report. The organization needs to continue to improve operating yield in the future. It will be difficult to maintain cash flow, improve (or even maintain) program services, and generate strong returns on assets with the current level of performance.

It is also important to note that this period's operating yield improvements came as a result of decreased costs. While it is good to decrease costs when revenues are falling, and when the operating yield is weak generally as it is here, it can be difficult to continually improve the operating yield by cutting costs over the long run. This is because costs tend to rise naturally over time. If this organization wants to improve its operating margin to the sector average and above, it will likely need to increase its revenues in the future.

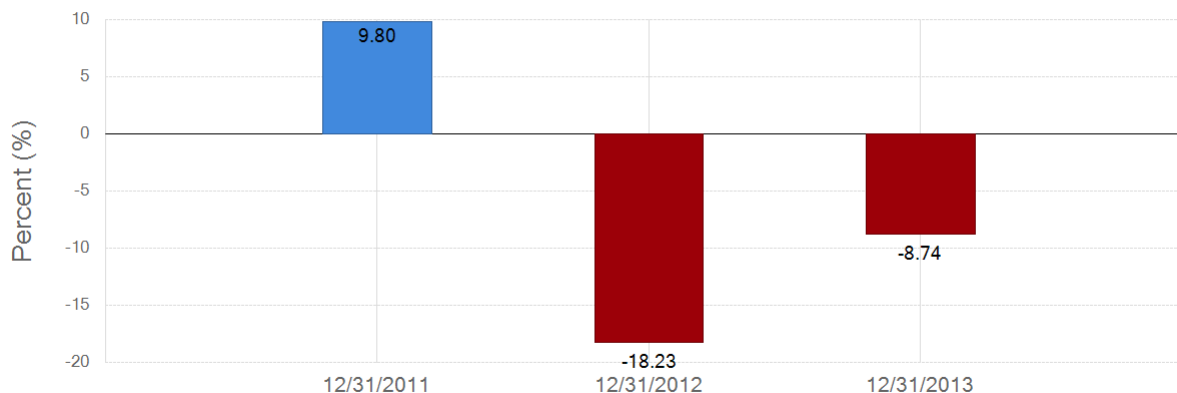
<sup>1</sup> Operating yield (net operating gain/loss) is the nonprofit equivalent of net profit.

Gross Program Margin = Gross Yield / Total Unrestricted Revenue



This number indicates the percentage of revenue that is left over after paying for program expenses. It is an important statistic that can be used in business planning because it indicates how many cents of gross program profit can be generated by future revenue and also what percentage of revenue the organization can use for other expenses such as administration and fundraising.

Operating Margin = Operating Yield / Total Unrestricted Revenue



A very important number. In fact, over time, it is one of the more important barometers that we look at. It measures how many surplus cents the organization is generating for every dollar it sells. This is a very important number in preparing forecasts.

## Revenue

A measure of how revenue is growing and how it lends itself to the organization's program services.

Revenue numbers tend not to mean much by themselves. What is truly important is how revenue numbers affect an organization's program services and operating yield. For this organization, it is unfavorable that revenues are down. It is even more unfavorable that while revenues are down the organization has added significantly to its employee and asset bases. Basically, the organization is now generating far less revenue per employee and asset. Remember that the new employees and assets ultimately have to be "funded" from revenue-generated cash, so this dynamic could be harmful to the organization if it continues over the long run.

---

The next three sections will examine how effectively the organization is using three of its most important resources: borrowed funds, assets, and employees. Ultimately, effectiveness here is determined by comparing changes in these resources to changes in the organization's revenue level. Resources are costs that should be used to leverage higher revenues, since higher revenues are necessary to improve and expand the organization's program services and make progress toward its mission.

---

## Borrowing

A measure of how responsibly the organization is borrowing and how effectively it is managing debt.

This organization's results are actually good in that revenues fell but at a slower rate than the level of debt. This means that the organization is carrying less debt **relative** to revenues for this period as compared to last period. Over time, this may actually help improve revenues, since debt carries a cost.

It is difficult to develop a debt strategy here. It is true that revenues and debt fell from last period. What should be explored is whether further decreases/increases in assets and debt can improve revenues. It is important to think about the relationship between borrowed dollars and revenues; as always, the organization should make only investments that will improve revenues.

## Assets

A measure of how effectively the organization is utilizing their gross fixed assets.

Assets are like any other strategic weapon. If used effectively, they should lead to improved financial performance. Fixed assets generate long-term revenue growth.

This organization has invested in some fixed assets but revenues fell during the same period. This is not a favorable combination. The asset additions may not have caused revenues to fall, but over time additions should help improve revenue levels. Otherwise, there is no advantage to investing in assets. On a positive note, it should be mentioned that the addition of the assets has not hurt overall liquidity or the operating margin; both of these have improved.

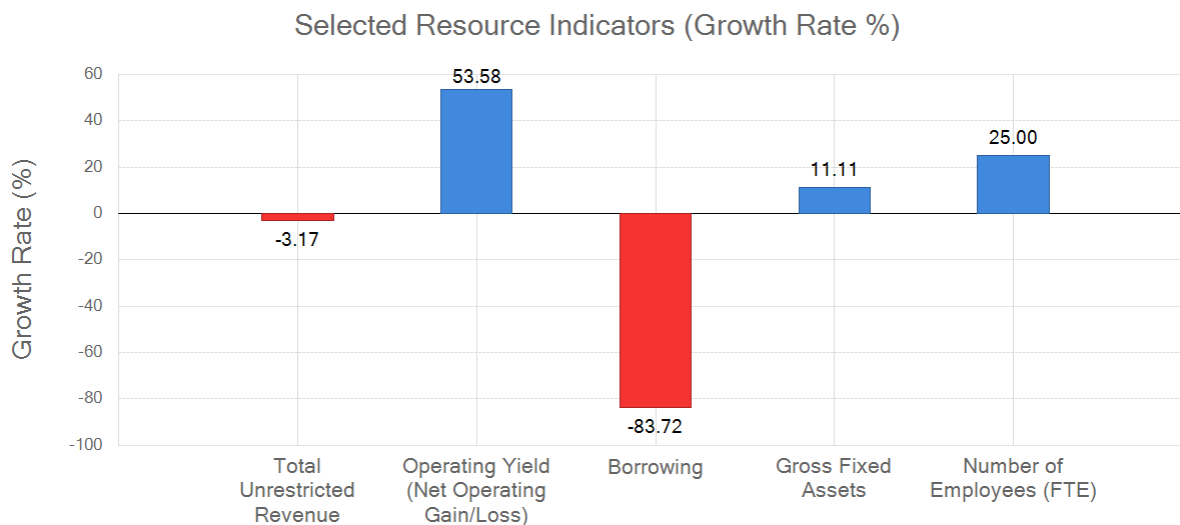
## Employees

A measure of how effectively the organization is hiring and managing its employees.

This organization has hired significantly more staff, but revenues have actually fallen from last period. This is not an ideal result. Nonprofits should generally boost revenues when

adding personnel -- even employees are a form of leverage.

Unless this is a **deliberate strategy** to build the organization by hiring staff who will contribute to revenues in the future, this is probably a situation that should be avoided. The organization has also increased its assets, which also adds stress to these results. Organizations prefer to see revenues leveraged when additional resources are added. This analysis is based upon past data and is therefore limited, but these points should be considered when managers are planning for the organization's future. The organization may need to allow some time for the new hires and assets to improve revenues.



This data is based on the two most recent available periods.

## Sector Scorecard

Financial Indicator	Current Period	Sector Range	Distance from Sector
<b>Program Efficiency</b> = Program Service Expenses / Total Expenses  <b>Explanation:</b> Shows the basic relationship between program expenses and total expenses. The best outcome would be a ratio close to 1, where the majority paid by a nonprofit would go towards "programs". This ratio is typically keenly watched by employees, managers, Board members, donors, and contributors. It tends to be one of the more important metrics that many nonprofits use in assessing performance.	0.84	0.77 to 0.87	0.00%
<b>Fundraising Efficiency</b> = Unrestricted Contributions / Unrestricted Fundraising Expenses  <b>Explanation:</b> Shows how much contribution revenue a nonprofit can generate from fundraising activities/expenses. The ideal relationship is a high number, which would mean that the nonprofit is able to generate a multiple of how much it costs to do fundraising.	15.75	5.00 to 15.00	+5.00%
<b>Current Ratio</b> = Total Current Assets / Total Current Liabilities  <b>Explanation:</b> Generally, this metric measures the overall liquidity position of an organization. It is certainly not a perfect barometer, but it is a good one. Watch for big decreases in this number over time. Make sure the accounts listed in "current assets" (numerator) are collectible. The higher the ratio, the more liquid the organization is.	1,933.69	1.90 to 5.50	+35,058.00%
<b>Quick Ratio</b> = (Cash + Total Receivables) / Total Current Liabilities  <b>Explanation:</b> This is another good indicator of liquidity, although by itself, it is not a perfect one. If there are receivable accounts included in the numerator, they should be collectible. Look at the length of time the organization has to pay the amount listed in the denominator (current liabilities). The higher the number, the stronger the organization.	1,898.61	1.30 to 3.52	+53,837.78%
<b>Receivable Days</b> = (Total Receivables / Total Unrestricted Revenue) * 365  <b>Explanation:</b> This number reflects the average length of time required to collect cash from receivable accounts such as pledged contributions and/or program services transactions completed using credit. It is crucial to maintaining positive liquidity.	0.94 Days	20.00 to 50.00 Days	+95.30%
<b>Receivable Days Less Contributions</b> = ((Total Receivables - Contributions Receivable) / (Total Unrestricted Revenue - Contributions)) * 365  <b>Explanation:</b> This number reflects the average length of time required to collect cash from all receivable accounts except pledged contributions. It is crucial to maintaining positive liquidity.	13.73 Days	N/A	N/A
<b>Payable Days</b> = (Payables / Program Service Expenses) * 365  <b>Explanation:</b> This ratio shows the average number of days that lapse between the purchase of material and labor, and payment for them. It is a rough measure of how timely an organization is in meeting payment obligations.	0.06 Days	10.00 to 40.00 Days	+99.40%
<b>Days Cash Reserve</b> = (Unrestricted Cash / (Total Expenses - Depreciation and Amortization)) * 365  <b>Explanation:</b> Cash reserve is a rough measure of the amount of cash on hand to cover future expenses. The organization should target 182 or more days of cash reserve.	52.67 Days	120.00 to 244.00 Days	-56.11%
<b>Gross Program Margin</b> = Gross Yield / Total Unrestricted Revenue  <b>Explanation:</b> This number indicates the percentage of revenue that is left over after paying for program expenses. It is an important statistic that can be used in business planning because it indicates how many cents of gross program profit can be generated by future revenue and also what percentage of revenue the organization can use for other expenses such as administration and fundraising.	8.17%	15.00% to 65.00%	-45.53%
<b>Operating Margin</b> = Operating Yield / Total Unrestricted Revenue  <b>Explanation:</b> A very important number. In fact, over time, it is one of the more important barometers that we look at. It measures	-8.74%	-1.50% to 1.50%	-482.67%

how many surplus cents the organization is generating for every dollar it sells. This is a very important number in preparing forecasts.

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**NOTE:** Exceptions are sometimes applied when calculating the Financial Indicators. Generally, this occurs when the inputs used to calculate the ratios are zero and/or negative.

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**READER:** Financial analysis is not a science; it is about interpretation and evaluation of financial events. Therefore, some judgment will always be part of our reports and analyses. Before making any financial decision, always consult an experienced and knowledgeable professional (accountant, banker, financial planner, attorney, etc.).

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