Year-To-Date (YTD) Revenues, less YTD Expense, plus or minus the prior year balance carryforward (PYB) equals the service center's Net Balance.

The +/-15% for academic centers or +/-5% for administrative centers breakeven calculation equals the Net Balance, divided by the YTD expense plus or minus the prior year balance carryforward (PYB).

<table>
<thead>
<tr>
<th>YTD Revenues</th>
<th>less</th>
<th>YTD Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>plus or minus</td>
<td>PYB</td>
<td>equals Net Balance</td>
</tr>
</tbody>
</table>

Breakeven % = \[
\frac{\text{Net Balance}}{\text{YTD expense} \pm \text{PYB}}
\]

Examples for an Administrative Service Center with a +/-5% Breakeven

1. An administrative service center's first year of operation, or a prior year balance (PYB) carryforward of zero. Income equals $4,000,000, expense equals $4,150,000.

   \[
   \begin{align*}
   \text{YTD Revenues} &= 4,000,000 \\
   \text{less YTD Expense} &= (4,150,000) \\
   \text{plus or minus PYB} &= 0 \\
   \text{Net Balance} &= (150,000) \\
   \text{Breakeven %} &= \frac{(150,000)}{4,150,000} = 3.61\% \\
   \end{align*}
   \]

   The service center is within +/-5%. No action is necessary.

2. Next year: same service center, same revenues and expense.

   \[
   \begin{align*}
   \text{YTD Revenues} &= 4,000,000 \\
   \text{less YTD Expense} &= (4,150,000) \\
   \text{plus or minus PYB} &= (150,000) \\
   \text{Net Balance} &= (300,000) \\
   \text{Breakeven %} &= \frac{(300,000)}{4,300,000} = 6.98\% \\
   \end{align*}
   \]

   The administrative service center will probably choose to offset the $300,000 loss with unrestricted departmental funds rather than charge all users a prorated portion of the loss.
3. Administrative service center PYB was an overrecovery of $75,000 instead of the $150,000 underrecovery PYB in Example 2. Revenue and expense are unchanged.

\[
\begin{align*}
 \text{YTD Revenues} &= 4,000,000 \\
 \text{less YTD Expense} &= (4,150,000) \\
 \text{plus or minus PYB} &= 75,000 \\
 \text{Net Balance} &= (75,000) \\
 \text{Breakeven \%} &= (1.84\%) \\
\end{align*}
\]

Net Balance = $ (75,000)  
Breakeven \% = (1.84\%) under-recovered

The service center is within +/-5%. No action is necessary.

4. Service center overrecovery, within breakeven:

\[
\begin{align*}
 \text{YTD Revenues} &= 4,000,000 \\
 \text{less YTD Expense} &= (4,150,000) \\
 \text{plus or minus PYB} &= 175,000 \\
 \text{Net Balance} &= 25,000 \\
 \text{Breakeven \%} &= 0.63\% \\
\end{align*}
\]

Net Balance = $ 25,000  
Breakeven \% = 0.63\% over-recovered

The administrative service center is within +/-5%. No action is necessary.

5. Administrative service center overrecovery, outside breakeven:

\[
\begin{align*}
 \text{YTD Revenues} &= 4,000,000 \\
 \text{less YTD Expense} &= (4,150,000) \\
 \text{plus or minus PYB} &= 380,000 \\
 \text{Net Balance} &= 230,000 \\
 \text{Breakeven \%} &= 6.1\% \\
\end{align*}
\]

Net Balance = $ 230,000  
Breakeven \% = 6.1\% over-recovered

The entire overrecovery, $230,000, would have to be refunded proportionately among the service center's users. Since administrative centers generally have hundreds of accounts, they are very motivated to maintain a strict watch throughout the year to avoid this extremely tedious task.
Examples for an Academic Service Center with a +/- 15% Breakeven:

1. An academic service center’s first year of operation, or a prior year balance (PYB) carryforward of zero. Income equals $300,000 expense equals $270,000.

   | YTD Revenues = $ 300,000 |
   | less YTD Expense = (270,000) |
   | plus or minus PYB = 0 |

   Net Balance = $ 30,000 gain/over-recovery

   Breakeven % = 30,000 11.1% over-recovered

   Breakeven % = $ 270,000

The service center is within +/- 15%. No action is necessary.

2. Next year: same service center, same revenues and expense.

   | YTD Revenues = $ 300,000 |
   | less YTD Expense = (270,000) |
   | plus or minus PYB = 30,000 |

   Net Balance = $ 60,000 gain/over-recovery

   Breakeven % = 60,000 25.0% over-recovered

   Breakeven % = $ 240,000

   The academic service center will have to refund the $60,000 gain proportionately to all users.

3. Or next year: same service center, same revenues but an increase in expense.

   | YTD Revenues = $ 300,000 |
   | less YTD Expense = (400,000) |
   | plus or minus PYB = 30,000 |

   Net Balance = $( 70,000) loss/under-recovery

   Breakeven % = $(70,000) (18.92%) under-recovered

   Breakeven % = $ 370,000

   The academic service center will have to charge the $70,000 loss proportionately to all users or subsidize the loss from a departmental gift or unrestricted fund.