Unfunded Liabilities
Numbers 24 - 25
FY 1998 - FY 2007

Changes in unfunded liabilities can be monitored by the use of the following indicators:

- Pension Assets
- Accumulated Employee Leave

City of Columbia
Columbia, Missouri
An unfunded liability is a liability incurred during the current or a prior year that does not have to be paid until a future year, and for which reserves have not been set aside. Due to their potential magnitude, if these types of obligations are permitted to grow over a long period of time, they can have a substantial affect on a city's financial condition.

Most unfunded liabilities have significant potential because:

(1) they do not show up in ordinary records in any way, making it difficult to assess their impact; and

(2) they build up gradually over time, and it is not easy to notice them until they become severe.

Examples could be pension liabilities and employee benefit liabilities.
Indicator 24

PENSION ASSETS

Warning Trend:
Decreasing Value of Pension Assets as a Percentage of Benefits Paid

Formulation:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Pension Plan Assets *</th>
<th>Benefits Paid</th>
<th>Ratio Of Assets To Benefits Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$87,300,395</td>
<td>$4,457,749</td>
<td>19.6</td>
</tr>
<tr>
<td>1999</td>
<td>$98,788,558</td>
<td>$5,021,851</td>
<td>19.7</td>
</tr>
<tr>
<td>2000</td>
<td>$107,833,717</td>
<td>$5,550,035</td>
<td>19.4</td>
</tr>
<tr>
<td>2001</td>
<td>$116,140,896</td>
<td>$6,471,052</td>
<td>17.9</td>
</tr>
<tr>
<td>2002</td>
<td>$117,370,785</td>
<td>$7,420,606</td>
<td>15.8</td>
</tr>
<tr>
<td>2003</td>
<td>$123,638,317</td>
<td>$8,090,630</td>
<td>15.3</td>
</tr>
<tr>
<td>2004</td>
<td>$136,267,107</td>
<td>$8,958,846</td>
<td>15.2</td>
</tr>
<tr>
<td>2005</td>
<td>$133,886,136</td>
<td>$9,537,521</td>
<td>14.0</td>
</tr>
<tr>
<td>2006</td>
<td>$139,925,212</td>
<td>$10,676,985</td>
<td>13.1</td>
</tr>
<tr>
<td>2007</td>
<td>$159,820,093</td>
<td>$11,296,487</td>
<td>14.1</td>
</tr>
</tbody>
</table>

* Pension Assets: LAGERS (Local Governmental Employees Retirement System) and Police and Firefighters' Pension Plan.

Description:

Most of a pension plan's assets are held as cash or investments. A steady decline in this ratio may indicate serious problems in the management or design of the pension plan.
**Analysis:**

"Benefits paid" coverage was more than adequate in all years because both pension programs are funded as benefits are accrued and money put in reserve for when the benefits will have to be paid ("full funding" - in accordance with the annual actuarial report). Costs of the benefits are not deferred to future years. The analysis of a pension plan is extremely technical and complex. Professional actuaries or independent auditors should be the source used to arrive at definitive conclusions. Such actuarial reports are prepared on a regular basis for all of the City's pension systems.

The ratio of assets to benefits paid has declined over this period due to various benefit enhancements and a downturn in the investment market in the early 2000's. However, the City does not consider this a warning sign due to full funding of the actuarial computed contributions each year.

**Sources:**

--FY 1997 to FY 2001 City of Columbia Comprehensive Annual Financial Reports, Exhibits A-6
--FY 2002 to present City of Columbia Financial Management Information Supplement, Exhibits A-6
--LAGERS Actuarial Reports

**Notes:**
Indicator 25

ACCUMULATED EMPLOYEE LEAVE

Warning Trend:
Increasing Amount of Average Vacation Accumulated Per Municipal Employee

Formulation:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Accumulated Hours of Earned Vacation</th>
<th>Number Of Municipal Employees</th>
<th>Hours Of Earned Accumulated Vacation Per Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>93,015</td>
<td>1,005.90</td>
<td>92.47</td>
</tr>
<tr>
<td>1999</td>
<td>85,443</td>
<td>1,040.70</td>
<td>82.10</td>
</tr>
<tr>
<td>2000</td>
<td>88,992</td>
<td>1,057.15</td>
<td>84.18</td>
</tr>
<tr>
<td>2001</td>
<td>92,731</td>
<td>1,077.20</td>
<td>86.09</td>
</tr>
<tr>
<td>2002</td>
<td>93,311</td>
<td>1,113.35</td>
<td>83.81</td>
</tr>
<tr>
<td>2003</td>
<td>92,612</td>
<td>1,129.60</td>
<td>81.99</td>
</tr>
<tr>
<td>2004</td>
<td>96,729</td>
<td>1,143.30</td>
<td>84.61</td>
</tr>
<tr>
<td>2005</td>
<td>98,925</td>
<td>1,167.55</td>
<td>84.73</td>
</tr>
<tr>
<td>2006</td>
<td>106,090</td>
<td>1,192.25</td>
<td>88.98</td>
</tr>
<tr>
<td>2007</td>
<td>106,027</td>
<td>1,223.00</td>
<td>86.69</td>
</tr>
</tbody>
</table>

Description:

Cities usually allow their employees to accumulate some portion of unused vacation and sick leave, which may be paid at termination or retirement. The expenditure liability is rarely funded while it is being accumulated. The benefits become a real cost when the employees are actually paid for their accumulated leave. The amount of this liability should be watched closely, unless such policies begin to contribute to an exaggerated increase in the amount of unfunded liability.
Analysis:

Since 1989, management has made a concentrated effort to reduce the accumulated hours of earned vacation. The hours of earned accumulated vacation leave per employee has varied from a high of 92.47 to a low of 81.99 during the period shown, which is a 11.33% fluctuation.

The FY 2007 figure represents 10.84 work days per employee of accumulated vacation leave. This total translates into 2.17 weeks of leave which is an acceptable number of weeks of accumulated employee vacation leave.

Sources:

--City of Columbia Human Resources
--City of Columbia Annual Budget

Notes: