Michigan’s Fiscal Indicator System, Early Warning and Prevention

Rod Taylor and Dan Horn
Community Engagement and Finance Division (CEFD)
Bureau of Local Government Services
Michigan Department of Treasury

Fiscal Indicator System
2007

• Treasury implemented a local government fiscal indicator system in 2007.

• Michigan State University’s Institute for Public Policy and Social Research designed it.

• Designed as:
  • Preventative tool;
  • To identify potential fiscal problems among cities, counties, villages, and townships.
The 9 indicators:
1) population growth;
2) real taxable valuation;
3) large real taxable value decrease;
4) GF expenditures as a percentage of taxable valuation;
5) GF operating deficits;
6) prior GF operating deficits;
7) size of GF balance;
8) fund deficits in current or previous years;
9) general long-term debt as a percentage of taxable value;

Observations

- Nine (9) metrics.
- The number of metrics provided comprehensive view of local unit.
- Local unit's long- and short-term viability was assessed.
- Each local unit's score was calculated and posted to Dept. of Treasury's website.
- Data static.
Fiscal Indicator System
2018

Analytics, Partnership, Prevention (APP)

- **Analytics, partnership, and prevention** are sequential components that:
  - Identify
  - Assist
  - Position (for success)

- APP is an early warning system;

- APP’s objective: partner in developing fiscally resilient communities.

Analytics, Partnership, Prevention (APP)

**Analytics**
- Composite Scores of Local Units
- Stress Determined

**Partnership**
- Outreach to Local Units
- Develop Plan of Action
- Resource/assistance
- State & Regional Partnerships

**Prevention**
- Implement Plan of Action
- Resource/assistance
- Best practices
- Training, education
- FRC certification
Fiscal Indicator System 2018

the Analytics of APP

Four Indicators

1. **Cash Ratio** - Cash and Cash Equivalents / Total Current GF liabilities.

2. **GF Balance Ratio** - (Assigned + Unassigned + Committed) / GF Revenues

3. **Net Assets Ratio** - (Total Assets - Total Liabilities) / Governmentwide Revenues

4. **Taxable Value per Capita** - Taxable Value / Population

EXAMPLE: Scoring Taxable Value per capita:

- **Current Year**
  - 15 points for less than 10k
  - 10 10-17.5k
  - 5 for 17.5k to 20k
  - 0 for >20000

- **Trend**
  - 10 points for declining ratio for 3 consecutive years
  - 6.67 points for declining ratio 2 of previous 3 years
  - 3.33 point for declining ratio 1 previous 3 years
  - 0 points for no declining ratio over previous 3 years

- A composite score out of 100 is generated for every local unit of government (1,856).
- The higher the composite score, the more likely stress is present.
Fiscal Indicator System 2018

What’s being measured?

1. **Cash Ratio — Cash solvency.** A local government's liquidity and effective cash management, and its ability to pay current liabilities.

2. **GF Balance Ratio — Budgetary solvency.** The ability of the government to generate sufficient revenue to fund its current or desired service levels.

3. **Net Assets Ratio — Long-run solvency.** The impact of existing long-term obligations on future resources.

4. **Taxable Value per Capita -Service level solvency.** The ability of the government to provide and sustain a service level that citizens require and desire.

Additional metrics utilized

- Pension/OPEB data
- Qualified Statement of Deficiencies
- Auditing Procedures Report Deficiency (APR)
- Audit of Minimum Assessing Requirements (AMAR)
- Socio-economic (per capita income, median household income, unemployment, industries, occupations, population distribution, etc.)
Fiscal Indicator System 2018

Exhibit A, 2010-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Composite Score</th>
<th>Current Year Score</th>
<th>Trend Score</th>
<th>Cash Ratio</th>
<th>GF FB Ratio</th>
<th>Net Assets Ratio</th>
<th>TV Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>18.75</td>
<td>18.75</td>
<td>0.00</td>
<td>1.25</td>
<td>0.17</td>
<td>0.38</td>
<td>$18,828.63</td>
</tr>
<tr>
<td>2011</td>
<td>37.50</td>
<td>27.5</td>
<td>10.00</td>
<td>2.57</td>
<td>0.16</td>
<td>0.38</td>
<td>$17,093.29</td>
</tr>
<tr>
<td>2012</td>
<td>51.25</td>
<td>31.25</td>
<td>20.00</td>
<td>1.10</td>
<td>0.09</td>
<td>0.31</td>
<td>$15,562.59</td>
</tr>
<tr>
<td>2013</td>
<td>81.66</td>
<td>45</td>
<td>36.66</td>
<td>0.55</td>
<td>0.00</td>
<td>0.15</td>
<td>$14,553.75</td>
</tr>
<tr>
<td>2014</td>
<td>86.66</td>
<td>50</td>
<td>36.66</td>
<td>0.24</td>
<td>-0.05</td>
<td>0.25</td>
<td>$14,099.70</td>
</tr>
<tr>
<td>2015</td>
<td>71.66</td>
<td>45</td>
<td>26.66</td>
<td>0.55</td>
<td>0.01</td>
<td>0.20</td>
<td>$14,160.06</td>
</tr>
<tr>
<td>2016</td>
<td>37.50</td>
<td>27.5</td>
<td>10.00</td>
<td>2.14</td>
<td>0.14</td>
<td>0.32</td>
<td>$14,160.35</td>
</tr>
<tr>
<td>2017</td>
<td>34.17</td>
<td>27.5</td>
<td>6.67</td>
<td>1.28</td>
<td>0.16</td>
<td>0.31</td>
<td>$14,289.36</td>
</tr>
</tbody>
</table>

Exhibit A, 2010-2018

Composite Score

-20.00
0.00
20.00
40.00
60.00
80.00
100.00
120.00
140.00

Forecast  Lower Confidence Bound  Upper Confidence Bound
Fiscal Indicator System 2018

Strengths:
• Simplicity. Less indicators. Real-time.
• Objective, consistent monitoring.
• Detects stress early.
• APP model predicated on communications, partnership, leveraging resources.
• Avoids state intervention or the need to take over local decision-making authority.

Weaknesses:
• Lacks statutory authority.
• No dedicated resources.
• Participation is voluntary.

To be continued...

the Analytics of APP

– Infrastructure-cost measurement (actual capital infrastructure debt).
  • How to capture unmeasured, unassessed capital needs?
– PA 202 pension / OPEB debt.
  • local unit reporting fatigue
  • quantity v. quality (data)
  • eliminate duplication
  • etc.
PA 202 of 2017 Background

• Protecting Local Government Retirement and Benefits Act (PA 202) implements the recommendations from the Responsible Retirement Reform Task Force
• The act incorporates four stages:
  
  • Transparency through reporting
  • Identification of potential problems
  • Review for fiscal health (waiver process)
  • Develop action plan

• The act is not perfect – implementation challenges!

Community Engagement and Finance Division

Contact Information

• Rod Taylor, Administrator
taylorr23@michigan.gov
• Dan Horn, Analytics & Outreach Manager
hornd6@michigan.gov

• www.michigan.gov/cefd
• www.michigan.gov/localretirementreporting