What is financial "benchmarking"?

- A measurement of the quality of an organization's policies, products, programs, strategies, etc., and their comparison with standard measurements, or similar measurements of its peers.

- Source: http://www.businessdictionary.com/definition/benchmarking.html
Determine areas for improvement.
Determine areas of excellence.
Analyze how other organizations achieve their high performance levels.

Do “standard measurements” exist? (in regards to pooling financial statements)

Association of Governmental Risk Pools (AGRiP) – Financial Benchmarking Initiative (FBI)

“AGRiP is actively developing a financial benchmarking tool for member pools. This unique and public entity pooling-specific tool will allow comparison between a pool’s own financial results and nationwide statistics or a customizable cohort of peers.”

http://www.agrip.org/financial-benchmarking/
The AGRiP “F.B.I.”…

14 financial ratios using data from audited financial statements organized by **leverage**, **profitability**, **liquidity**, and **expense** ratios.

http://www.agrip.org/financial-benchmarking/

Start with the Statement of Net Position

Board Member question: “The pool’s Net Position (surplus) **dropped** from last year by over $7.5MM... Cause for concern?”

<table>
<thead>
<tr>
<th>STATEMENTS OF NET POSITION</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CURRENT ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Equivalents</td>
<td>$49,000,000</td>
<td>$52,000,000</td>
</tr>
<tr>
<td>Investments</td>
<td>$8,000,000</td>
<td>$14,500,000</td>
</tr>
<tr>
<td>TOTAL CURRENT ASSETS</td>
<td>$57,000,000</td>
<td>$66,500,000</td>
</tr>
<tr>
<td>NONCURRENT ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>$100,000,000</td>
<td>$97,000,000</td>
</tr>
<tr>
<td>Net OPERA Asset</td>
<td>$2,300,000</td>
<td>$2,100,000</td>
</tr>
<tr>
<td>Capital Assets - net</td>
<td>$6,200,000</td>
<td>$6,300,000</td>
</tr>
<tr>
<td>TOTAL NONCURRENT ASSETS</td>
<td>$108,500,000</td>
<td>$105,700,000</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>$165,500,000</td>
<td>$172,200,000</td>
</tr>
<tr>
<td><strong>DEFERRED OUTFLOWS OF RESOURCES</strong></td>
<td>50,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Deferred outflows of resources related to pensions</td>
<td>50,000</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CURRENT LIABILITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>$800,000</td>
<td>$450,000</td>
</tr>
<tr>
<td>Provision for claims</td>
<td>$18,500,000</td>
<td>$19,000,000</td>
</tr>
<tr>
<td>TOTAL CURRENT LIABILITIES</td>
<td>$19,300,000</td>
<td>$19,450,000</td>
</tr>
<tr>
<td>NONCURRENT LIABILITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claims incurred but not reported</td>
<td>$7,000,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>TOTAL NONCURRENT LIABILITIES</td>
<td>$20,000,000</td>
<td>$21,000,000</td>
</tr>
<tr>
<td>TOTAL LIABILITIES</td>
<td>$27,300,000</td>
<td>$26,450,000</td>
</tr>
<tr>
<td><strong>DEFERRED INFLOWS OF RESOURCES</strong></td>
<td>90,000</td>
<td>47,000</td>
</tr>
<tr>
<td>Deferred inflows of resources related to pensions</td>
<td>90,000</td>
<td>47,000</td>
</tr>
<tr>
<td><strong>NET POSITION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net investment in capital assets</td>
<td>$6,200,000</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>$112,960,000</td>
<td>$120,278,000</td>
</tr>
<tr>
<td>TOTAL NET POSITION</td>
<td>$119,160,000</td>
<td>$126,728,000</td>
</tr>
</tbody>
</table>
Change in Net Position Ratio

Net Position (current) – Net Position (prior)

Net Position (prior)

$119,160,000 – $126,728,000

$126,728,000

-6%

Analyzes the “bottom line” after all financial transactions have been accounted for.

CHANGES IN NET POSITION

- **Increases** in Net Position are always good?
  - Could suggest underwriting susceptible to competition… (collecting too much from members)
  - Too liberal of reserving practice.

- **Decreases** in Net Position are always bad?
  - Dividends paid back to members
  - Market value changes of the Investment Portfolio
Staff Response Example

"Standard Risk Pool Insurance Authority" reported approximately $3,000,000 contribution shortfall, $1,000,000 increase in claims liabilities, and a mark-to-market reduction to investments of about $3,500,000.

What was the change in net position from the prior year?

Data Analytics Tools

1. Trend Analysis
2. Comparison to Other Pools of Similar Size
3. Establish Metrics/Key Performance Indicators (KPIs)
4. Set Targets and Evaluate Success
Option: Ratio analysis will provide insight to decreasing Net Position.

Loss Ratio + Expense Ratio = Combined Ratio

Combined Ratio + Investment results = Operating Ratio

Operating Ratio > 100% indicates reduction to Net Position.
Contribution Leverage Ratio:
Net Contributions / Net Position

Measures the degree of protection the pool’s net position provides relative to contributions it expects to write.

Net Contributions: $150,000,000 - 55,000,000 = $95,000,000

Net Position: $119,160,000

Contribution Leverage: $95,000,000 / 119,160,000 ≈ 0.80 (80%)
80%...Is that good?

Common insurance industry limit: **300% (the lower, the better)**

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80%...Is that good?

80% is typically a strong position

Supports long-term stability

Pool is better positioned to withstand unexpected losses
What if the ratio is 200%?

Surplus could be at risk…

- Possible shift in loss expectations?
- Newer members’ risk profiles turn out to be different than historical trends?

80% ratio indicates $119,160,000 of Net Position is available to protect against the risks associated with writing $95,328,000 of Contribution.

200% ratio depicts the same Net Position covering $238,320,000 of Contribution.
A common benchmark assessing the adequacy of pricing for a specific period.
Loss Ratio Calculation

Net Incurred Losses:
$95,000,000 + 5,000,000 = $100,000,000

Net Contributions:
$150,000,000 - 55,000,000 = $95,000,000

Loss Ratio: $100,000,000 / 95,000,000 ≈ 1.05 (105%)
### Budget Summary for Self-Insured Program

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Losses (Discounted)</td>
<td>3,265,000</td>
<td>49%</td>
</tr>
<tr>
<td>Confidence Margin</td>
<td>258,000</td>
<td>4%</td>
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<td>Operating Costs</td>
<td>1,184,564</td>
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<td>Multi-line and other discounts</td>
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<td>Reinsurance</td>
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<td>7%</td>
</tr>
<tr>
<td>Agent Commissions</td>
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<td>AOC/LOC Transfers</td>
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<td>Direct Discount</td>
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<td>1%</td>
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<tr>
<td>Broker</td>
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<td>0%</td>
</tr>
<tr>
<td>Contribution</td>
<td>6,597,578</td>
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This example displays broad categories of costs for a self-insured program. This program’s “break-even” loss ratio is 53%.

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**Board Member:**

“Does it seem like the pool’s overhead is too high? Seems like General & Administrative (G&A) costs are always rising!”

**Finance Rep:**

“We can analyze our company’s G&A: Non-Loss Expense to Net Contributions Ratio.”
Non-Loss Expense to Net Contributions* Ratio

*This presentation uses Non-loss Expense compared to Contributions. FBI currently uses Expense compared to Net Position.

Expense Ratio Calculation

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Sum of Expenses = $1,978,598

Expense Ratio = 1,978,598/6,597,578 = 30%

This example displays broad categories of costs for a self-insured program. This program's "break-even" loss ratio is 53%.
Further Analysis of the Non-Loss Expense to Net Contributions Ratio

How do we establish G&A metrics?

1. Benchmark non-loss costs against similarly sized pools around the country (AGRiP FBI)
2. Budget a pre-determined percentage of written premiums
3. Set cost-reduction goals (innovation, staffing, supplier changes, etc.)

Other key ratios

- Retention ratio
- Reserve Leverage ratio
A retention ratio is calculated as:

- Division of the pool’s largest per occurrence retention by the net position.
- This represents the number of SIR losses the net position can withstand.
- A common limit used by pools is 10.

Using a net position of $119,160,000 and a pool retention amount of $5,000,000 per occurrence:

\[
\frac{119,160,000}{5,000,000} \approx 24 \text{ losses at SIR.}
\]
Retirement ratio

- Pool outcomes between 10 and 70 are common
- Ratios of 70:1 (or more) may indicate the pool can take on more risk, or even a higher retention
- Ratios of 10:1 (or less) may indicate the pool is at higher risk in heavier loss years

Retirement ratio factors to consider
(Net Position/Pool Retention)

- Reinsurance costs (soft market may allow pools to carry lower per occurrence retention levels)
- Growing membership (more members means more risk of occurrences)
- Statutory limits on net position (retention levels can be adjusted to accommodate)
If your pool’s retention ratio is **70:1** or more, maybe it’s time to recommend to the board to raise the per occurrence amount?

Potential savings on reinsurance costs?

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**Reserve Leverage (Reserves/Net position)**

Using Claims Reserves & IBNR of $45,500,000

\[
\frac{45,500,000}{119,160,000} = 38\% 
\]
Reserve Leverage

- Measures a pool's ability to absorb larger than expected losses
- Typical industry range: between 50 to 200%. Lower is better.
- Higher ratios could indicate conservative reserving practices, but most likely point to inadequate Net Position

A reserve leverage ratio of 38% (lower than industry range) could signify that this pool is more financially able to absorb costs in excess of booked reserves.

What are your pool’s metrics when it comes to reserving practices?
Understanding the reserve ratio
- Study the claims development triangles
- A trend toward increasing ultimate as claims develop indicates claims reserves and ultimate estimates may be too optimistic.

In conclusion
- Change in Net Position Ratio
- Contribution Leverage Ratio
  - Loss Ratio
- Non-Loss Expense to Net Contributions Ratio
  - Retention Ratio
- Reserve Leverage Ratio

What financial ratios were covered?
Any other ratios recommended in AGRIP’s FBI?

http://www.agrip.org/financial-benchmarking/

- **Investment Leverage** (invested assets/net position)
- **Combined Ratio** (underwriting profit/loss)
- **Operating Ratio** (combined ratio net of investment income)
- **Portfolio Yield** (investment income/invested assets)
- **One-Year Reserve Development** (increase/decrease in reserves relative to net position)
- **Liability Leverage Ratio** (net liabilities/net position)
- **Net Leverage Ratio** (contribution leverage + reserve leverage)
- **Liabilities to Assets Ratio** (total liabilities/liquid assets)
In conclusion

1.) Explore analytical resources like AGRIP’s Financial Benchmarking Initiative. Compare results, identify trends, and set metrics and Key Performance Indicators (KPIs) to measure ongoing success.

2.) Use ratios to provide perspective for board members on the financial statements or financial health of the organization.

3.) Make ratio analysis a regular practice to help your pool save money, meet its financial goals, and ensure longevity of the organization.
In conclusion

QUESTIONS?

References:
1.) http://www.agrip.org/financial-benchmarking-